Traditional & Customary Practices Report for Manaʻe, Molokaʻi

Traditional Subsistence Uses, Mālama Practices and Recommendations,
and Native Hawaiian Rights Protections of Kamaʻāina Families of
Manaʻe Moku, East Molokaʻi, Hawaiʻi

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1. EXECUTIVE SUMMARY

1.1. PROJECT BACKGROUND

Over the years, the people of Manaʻe (East Molokaʻi) have witnessed a notable decline in the health of their watershed. A significant part of this declining health is the degradation of the mauka native forests, which has subsequently had a drastic effect on all of the ahupuaʻa of Manaʻe, from mauka to makai. Ensuring the well-being of these mauka areas is essential to the preservation and perpetuation of Native Hawaiian traditional and customary practices carried out in the moku (district), given the symbiotic relationship between the people and their ʻāina. Thus, Manaʻe residents are passionate about protecting their moku and the resources that sustain them. It is their protectiveness of their island – that often puts them at odds with each other in deciding how best to care for her – which is at the core of this report.

In 2013, the East Molokaʻi Watershed Partnership presented the draft East Slope Watershed Start-Up Management Plan ("East Slope Management Plan") to the Manaʻe community, and proposed the possibility of protecting Manaʻe's mauka rainforests with an expanded fencing project. That plan was based on the recognition that the degradation of these mauka areas was largely attributable to an influx of habitat altering invasive plant and animal species that have significantly impacted native forests, the life that inhabits them, and the freshwater they foster. The proposed fence has elicited strong reactions from the Manaʻe community – both for and against such a fence. It also has caused some community members to call for additional planning that looks at the entire moku and all of its ahupuaʻa, from mauka to makai. In response to these strong reactions, the planning process to create this report was undertaken.

The purpose of this report is to accomplish the following objectives:

a. **Recognize that the people of Manaʻe (East Molokaʻi) regularly exercise Native Hawaiian traditional and customary practices, and document those practices.**
b. **Provide an explanation of Native Hawaiian legal protections pertinent to Manaʻe kamaʻāina traditional and customary practices.**
c. **Develop a framework for a community-based Subsistence and Ahupuaʻa Management Plan for the Manaʻe Moku, Mauka to Makai.**
d. **Summarize community recommendations for the East Molokaʻi Watershed Partnership's East Slope Management Plan (January 2014 draft).**

The primary steps taken to reach these goals included:

- Documentation of residents' traditional and cultural practices in the moku of Manaʻe;
- Gathering manaʻo from key informants (kamaʻāina and other experts) regarding how best to protect these resources and practices;

- Analysis of legal protections specific to Manaʻe families exercising Native Hawaiian traditional and customary practices within their moku and ahupuaʻa;
- Reconciling varied perspectives and information where possible and finding common areas of agreement in manaʻo shared by Manaʻe families in terms of traditional and modern ʻāina stewardship and ahupuaʻa resource management;
- Identifying the recommendations that best incorporate and honor the collective manaʻo, and weaving them into a framework for a community-based Subsistence and Ahupuaʻa Management Plan for Manaʻe, Mauka to Makai.
- Summarizing community recommendations for the East Slope Management Plan.

Chapter 2 provides the following information:

- **An overview of the existing management efforts, namely the East Molokaʻi Watershed Partnership (EMoWP)**
- **A synopsis of the key points of the East Slope Management Plan (January 2014 draft)**
- **Community reactions and concerns regarding the East Slope Management Plan**
- **A description of the methods employed in the creation of this plan.**

1.2. FINDINGS

The island of Molokaʻi is historically known as " ʻĀina Momona" or "Abundant Land," referring to the bounty of food that was produced on its fertile lands and the wise governance and stewardship of these lands by the kūpuna who designed and cultivated healthy ahupuaʻa for not only themselves, but future generations.[1] Those resources continue to be available today, even if they are not as plentiful. Manaʻe is documented to be one of the most intact cultural and subsistence landscapes within Hawaiʻi.[2] An overwhelming number of kamaʻāina informants shared the sentiment that subsistence is "Very Important" for their family.[3] In addition, every ahupuaʻa in Manaʻe was identified as having various cultural, religious, and subsistence values, which indicates the extent and level of dependence that Manaʻe residents have on their resources.[4] It is clear that the entire moku of Manaʻe is vital to the subsistence lifestyle of its community and island residents. At the same time, the people of Manaʻe have witnessed a significant decline in the health and abundance of their ahupuaʻa resources, mauka to makai, which they are anxious to remedy.

Thus, any proposed conservation approach must take into account potential impacts to the subsistence lifestyle of Manaʻe residents. This chapter (3) includes an overview of the important traditional and customary practices and the resources those practices are dependent on, as identified by the kamaʻāina informants interviewed for this project. It consists of the following sections:

- **Significant Cultural Sites and Trails**
- **Nearshore Fisheries: Fishponds, Reefs, Estuaries, and Ocean Gathering Areas**
- **Hunting**
- **Degrading Watershed Health**

In addition, there is an overview of the community feedback in response to the East Slope Management Plan (January 2014 draft), and their thoughts on the proposed fencing. Based on what was presented in that draft Plan and what was shared by community in response, there are essentially five (5) primary ways this conservation effort could be pursued, which are described here, along with the main points heard regarding these options:

- **Proposed Fencing: Pua‘ahala to Hālawa**
- **Alternative 1: Fencing with Pākaikai Corridor**
- **Alternative 2: No Fence**
- **Alternative 3: Mauka-Makai Fencelines**
- **Alternative 4: Lowered Fenceline**

Finally, there was some feedback related to the fence that is summarized in the sub-section entitled: **Additional Community Mana‘o Regarding Fencing.**

1.3. LEGAL FRAMEWORK AND ANALYSIS

This chapter presents the legal framework and analysis that provides the basic legal foundation for Native Hawaiian rights law. It describes relevant constitutional and statutory provisions, as well as the body of common law developed from Hawai‘i Supreme court decisions on Native Hawaiian rights. This legal section is divided into specific areas of the law that correspond to mana‘o shared by Mana‘e kama‘āina informants. This mana‘o is analyzed within the context of the proposed expansion of the East Moloka‘i Watershed Partnership (EMoWP). It covers traditional subsistence activities in Mana‘e, religious and ceremonial protocols, and efforts to mālama ‘āina, in the following sections:

- **‘Aha Moku and Traditional Resource Management**
- **Sources of Native Hawaiian Rights Law**
- **Trails and Traditional Access**
- **Native Burials and Historic Sites Preservation**
- **Water Rights and the Public Trust Doctrine**
- **Subsistence Hunting – An Emergent Cultural Practice and Right**
- **The Value of Integrating Traditional Ecological Knowledge (TEK) in Natural Resource Management**

1.4. RECOMMENDATIONS

This final chapter focuses on the last two objectives of this report:

- **Develop a framework for a community-based Subsistence & Ahupua‘a Management Plan for the Mana‘e Moku, Mauka to Makai.**
- **Summarize community recommendations for the East Slope Management Plan**.

The majority of the kama‘āina informants interviewed do support a fence, as long as it is done with additional management efforts that are based on Native Hawaiian mālama ‘āina values and

traditional ahupuaʻa land management practices. From the manaʻo that was shared, the following overarching/foundational principles were identified:

- **Look at and consider the entire ahupuaʻa, from mauka to makai.**
- **Allow each ahupuaʻa to implement their vision for their place**.
- **Ensure access for Native Hawaiian traditional and customary practices.**
- **Implement management strategies incrementally, observe impacts, and make adjustments accordingly.**
- **Conservation efforts should include the hiring of local people and the utilization of community members in resource management.**

It is important to acknowledge that some informants are opposed to the utilization of a fence as any part of the conservation effort (reasons detailed within report). Most of those in opposition to the proposed fencing shared their ideal scenario, whereby a fence or some type of barrier would not be needed, and the people of Manaʻe could reclaim their traditional kuleana, both their rights and responsibility, to mālama (care for and manage) their land themselves. However, as many of these same informants have expressed, there are numerous challenges that make this proposition difficult.

With this in mind, the recommended approach aims to honor all manaʻo that was shared, and to weave it together into one unified framework for a community-based Subsistence and Ahupuaʻa Management Plan for the Manaʻe Moku. In addition, this report aims to strike a balance between modern conservation techniques and traditional Native Hawaiian land management practices.

Thus, it is recommended that fencing should be utilized as part of the conservation effort. However, in line with much of the input provided by the community, fencing alone is not enough. A larger Subsistence and Ahupuaʻa Management Plan should be written and implemented, and the East Slope Management Plan should be implemented with these community recommendations in mind, and through open dialogue with the community.

The recommendations are presented in the following sections:

- **Framework for a Subsistence & Ahupuaʻa Management Plan for the Manaʻe Moku, Mauka to Makai**
- **Community Recommendations for East Slope Management Plan**
- **Next Steps.**

[1] *A Mau A Mau (To Continue Forever): Cultural and Spiritual Traditions of Molokaʻi* (Nālani Minton and Nā Maka O Ka ʻĀina 2000) [hereinafter *A Mau A Mau*].
[2] COUNTY OF MAUI, MANAʻE GIS MAPPING PROJECT (2008) (on file with author).
[3] *See infra* Part 2.5.2.
[4] *See id.*

2. PROJECT BACKGROUND

2.1. PURPOSE

Over the years, the people of Manaʻe (East Molokaʻi) have witnessed a notable decline in the health of their watershed. A significant part of this declining health is the degradation of the mauka native forests, which has subsequently had a drastic effect on all of the ahupuaʻa of Manaʻe, from mauka to makai. Ensuring the well-being of these mauka areas is essential to the preservation and perpetuation of Native Hawaiian traditional and customary practices carried out in the moku (district), given the symbiotic relationship between the people and their ʻāina. Historically, the numerous ahupuaʻa of Manaʻe were very healthy and abundant with intact native forests that captured and stored rainfall to feed the aquifer, streams, springs, ʻauwai, fishponds, and estuaries. While these lands have become degraded over time, the ʻāina continues to support hunting, fishing, and gathering practices of Manaʻe families, which continue to be carried out regularly today. Thus, Manaʻe residents are passionate about protecting their moku and the resources that sustain them. It is their protectiveness of the land – that often puts them at odds with each other in deciding how best to care for her – which is at the core of this report.

In 2013, the possibility of protecting Manaʻe's mauka rainforests with a fence was proposed to the community through the draft East Slope Watershed Start-Up Management Plan ("East Slope Management Plan"). That plan was based on the recognition that the degradation of these mauka areas was largely attributable to an influx of habitat altering invasive plant and animal species that have significantly impacted native forests, the life that inhabits them, and the freshwater they foster. The proposed fence has elicited strong reactions from the Manaʻe community – both for and against such a fence. It also has caused some community members to call for additional planning that looks at the entire moku and all of its ahupuaʻa, from mauka to makai. In response to these strong reactions that consisted of a broad spectrum of opinions, the planning process to create this report was undertaken. (Note: a more detailed description of how this plan came to be is included in Section 2.4.)

The purpose of this report is to accomplish the following objectives:

a. **Recognize that the people of Manaʻe (East Molokaʻi) regularly exercise Native Hawaiian traditional and customary practices, and document those practices.**
b. **Provide an explanation of Native Hawaiian legal protections pertinent to Manaʻe.**
c. **Develop a framework for a community-based Subsistence and Ahupuaʻa Management Plan for Manaʻe Moku, Mauka to Makai.**
d. **Summarize community recommendations for the East Molokaʻi Watershed Partnership's East Slope Management Plan (January 2014 draft).**

The primary steps taken to reach these goals included:

- Documentation of residents' traditional and cultural practices in the moku of Manaʻe;
- Gathering manaʻo from key informants (kamaʻāina and other experts) regarding how best to protect these resources and practices;

- Analysis of legal protections specific to Manaʻe families exercising Native Hawaiian traditional and customary practices within their moku and ahupuaʻa;
- Reconciling varied perspectives and information where possible and finding common areas of agreement in manaʻo shared by Manaʻe families in terms of traditional and modern ʻāina stewardship and ahupuaʻa resource management;
- Identifying the recommendations that best incorporate and honor the collective manaʻo, and weaving them into a framework for a community-based Subsistence and Ahupuaʻa Management Plan for Manaʻe, Mauka to Makai; and
- Summarizing the community recommendations for the East Slope Management Plan.

It should be noted that the project area for this report is significantly larger than that of the East Slope Management Plan. For the purposes of that Plan, the "East Slope" is defined as the lands that "lie above the Forest Reserve boundary line between and including the ahupuaʻa of Puaʻahala to Hālawa." The project area for this report is extended to include (a) all areas makai of the Forest Reserve boundary from Puaʻahala to Hālawa, (b) west of Puaʻahala to Kamalō, and (c) the north shore, west of Hālawa to Pelekunu. Essentially, this is what was traditionally known as the "moku of Koʻolau."[5]

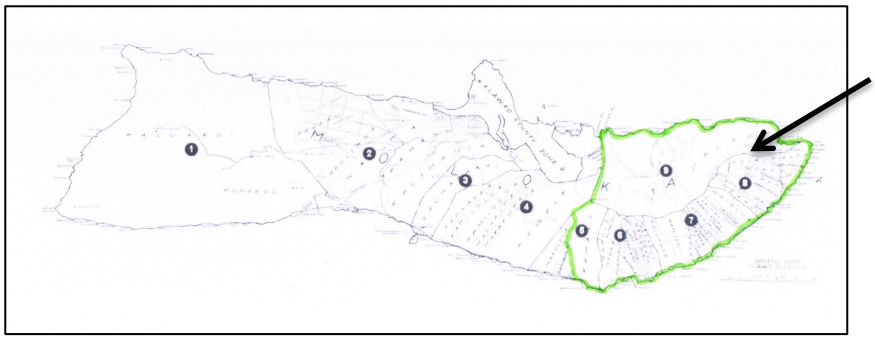


Figure 1. Map of Approximate Project Area: Moku of Koʻolau/Manaʻe.
Note: Going forward in this report, "Manaʻe Moku" generally refers to this entire area.

The reason for including the north shore (northeast) ahupuaʻa in this report is that the kamaʻāina informants expressed that what happens on the south shore may impact the north (e.g., migrational patterns of ungulates). They also shared that the mauka-makai trails that span south to north shore might be affected by the fence, which could present access issues. Additionally, the kamaʻāina informants expressed a reliance on resources located in the northeast and southeast shore, and that access between the two sides is critical. Thus, it became clear that Manaʻe could not be separated from the north shore, given the interaction and interdependence.

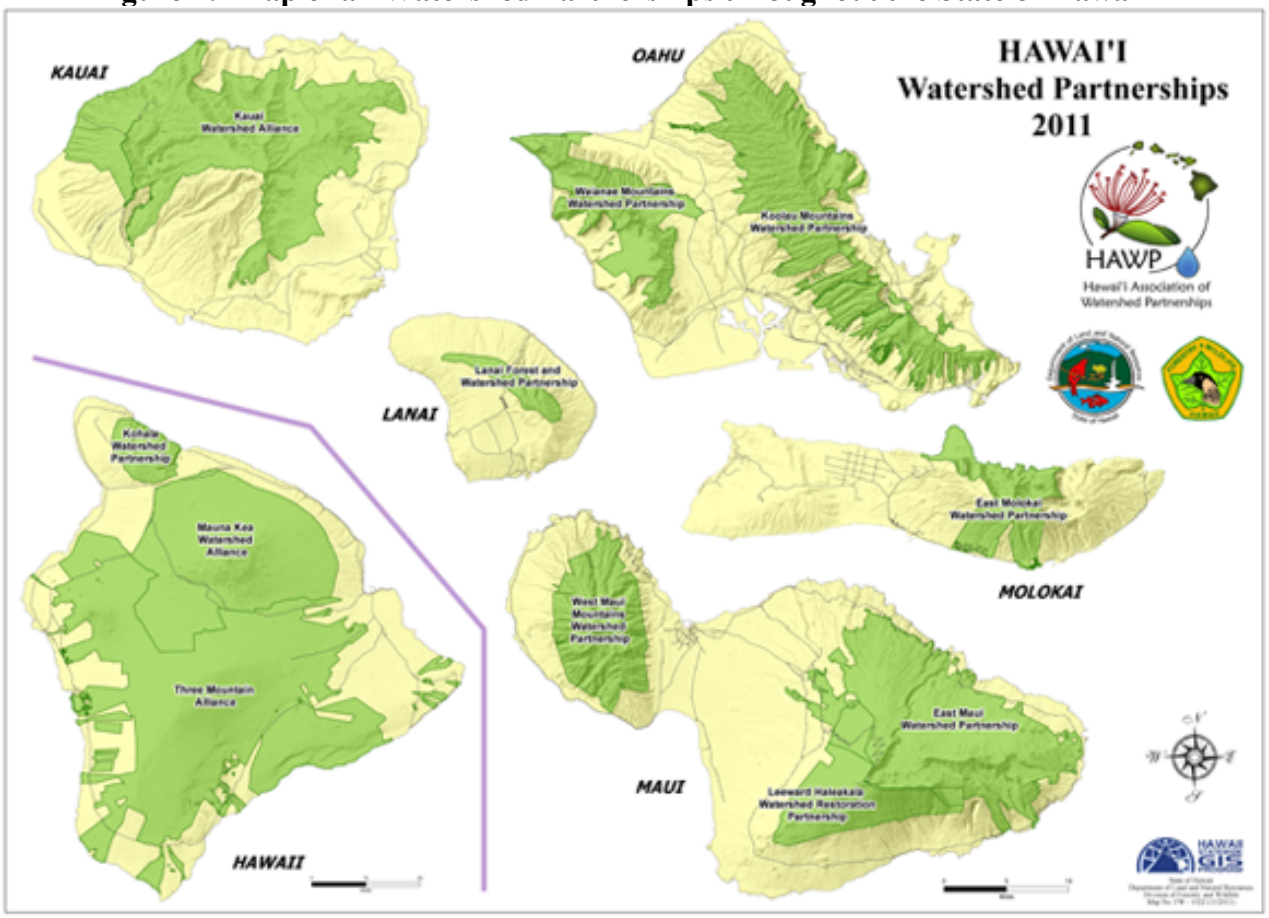
"Manaʻe" is the traditional and colloquial reference to East Molokaʻi. Literally, Ma-naʻe translates as "towards or to the east." Kamaʻāina of Manaʻe typically demarcate the boundaries of the district of Manaʻe as beginning from Kamalō ahupuaʻa (southeast), extending to the northeastern most tip of the island known as Hālawa ahupuaʻa.[6] Many families of Manaʻe trace their genealogies back to the northeast ahupuaʻa (especially Pelekunu and Wailau valleys). In ancient times, the highest concentration of Molokaʻi's population was located in the northeast ahupuaʻa due to access to the island's major water tributaries and ideal conditions for wetland taro cultivation, the staple food of early Hawaiians. As foreigners began to settle in Hawaiʻi during the Kingdom and U.S. Territorial period, the centers of early commerce on Molokaʻi began in Manaʻe, specifically in the southeast ahupuaʻa of Pukoʻo and Kamalō. As a result,

many of the north shore families of the Koʻolau (windward) region relocated to the southeast shore, yet still maintained cultural practices on both sides of the island.

2.2. THE EAST MOLOKAʻI WATERSHED PARTNERSHIP

This section provides an overview of the existing management efforts relating to and including the East Slope Management Plan. In an effort to protect the watershed areas of Molokaʻi, the East Molokaʻi Watershed Partnership (EMoWP) was created in 1999 to "maintain a healthy watershed that would sustain the future quality and quantity of Molokai's water supply as well as benefit Hawaii's native flora, fauna and ecosystems."[7] The EMoWP is part of the Hawaiʻi Association of Watershed Partnerships, which comprises 11 island-based Watershed Partnerships throughout Hawaiʻi. These partnerships work collaboratively with more than 71 public and private partners on 6 islands to protect over 2.2 million acres of vital forested watershed lands. Each of these partnerships is a voluntary collaboration between the State and private landowners who are committed to protecting forested lands that provide for water recharge, the conservation of finite resources, and the promotion of healthy ecosystems through collaborative management. The first official watershed partnership began in East Maui in 1991 and grew to include projects on all major islands in the state (see Figure 2 below).[8]

Figure 2: Map of all Watershed Partnerships throughout the State of Hawaiʻi



Source: http://hawp.org/partnerships/

The Nature Conservancy ("TNC") and a grassroots community effort, which eventually led to Molokaʻi's designation as a USDA Enterprise Community (EC), played key roles in the formation of the partnership and helped carry out its first project, the Kamalō/Kapualei Watershed Project ("KKWP"). Watershed protection received the most community votes and the KKWP was the first priority project to be funded by the EC. The hallmark initiative was completed in 2001 with the establishment of the 5.5-mile KKWP fence. Since this time, the EMoWP has grown to 24 partners, which include landowners, community and conservation groups, and funders who support actions to improve and take care of Molokai's native forests. It is a voluntary alliance, of which TNC is the coordinator. The EMoWP currently protects over 30,000 acres of watershed, including north and central Molokaʻi, extending east to the ahupuaʻa of Kapualei. The EMoWP, in partnership with TNC, has utilized the method of fencing in strategic locations of mountainous regions in designated watershed management units to protect pristine native forests from grazing pressure by introduced ungulates (goat, deer, and wild pig).[9]

In the 15 years since the inception of the Kamalō/Kapualei fence project, the protected native forest has shown visible signs of recovery and regrowth. In Kawela alone, erosion has been reduced 10-fold and vegetation has gone from 0% to 75% cover (most of which is native) in just 5 years of fencing and animal control in Kawela's most denuded areas.[10] The EMoWP is looking to expand its efforts and areas of protection further east from the adjacent ahupuaʻa at Puaʻahala to the easternmost ahupuaʻa of Hālawa (located within the moku of Manaʻe. See map on page 10). Many large landowners in East Molokaʻi have requested and/or agreed to have their lands be included as part of this conservation effort.[11] The project as currently proposed would encompass approximately 14,000 acres of native forests located in the upper watershed areas with fencing material. This ambitious and extensive project has the potential to impact the rural Manaʻe community whose livelihood is largely dependent on subsistence hunting, fishing, and gathering. Manaʻe families have communicated both their hopes and fears as to how the extended fenceline may either benefit or hinder traditional practices.

Overarching Management Goals for the EMoWP

The guiding management goals for the EMoWP, including the draft East Slope Management Plan, are founded upon the understanding that East Molokaʻi's native ecosystems are important to the water resources for the island; that active management of these native ecosystems is necessary to maintain healthy watersheds in order to sustain the future quality and quantity of Molokaʻi's fresh water supply; and that effective management of these resources is best achieved through the coordinated actions of all major landowners in the watershed.[12]

The EMoWP's overarching management goal is to protect watershed integrity through the management and restoration of biological diversity in partnership lands. TNC coordinates this partnership and aims to accomplish this goal through management efforts in designated areas to: control non-native plant and animal species in designated management areas; monitor these control efforts; conduct native plant restoration; prevent and reduce wildfire; perform community outreach, and; support coastal research and management activities along East Molokai's south shore and fringing reefs.[13] It is within this framework that the draft East Slope Management Plan (January 2014 draft) is presented.

2.3. SYNOPSIS OF THE KEY POINTS OF THE "EAST SLOPE WATERSHED START-UP MANAGEMENT PLAN"

The January 2014 draft East Slope Management Plan, while basically extending the fenceline (through implementation of new fenced units) along the remaining Manaʻe ahupuaʻa, shares the same overarching management goal as the rest of the EMoWP – to protect watershed integrity through the management and restoration of biological diversity in partnership lands.[14]

The East Slope Management Plan's **Guiding Management Goals** for resource management include:

1. Control ungulate populations in watershed management units.
2. Control invasive plants and prevent the establishment of new invasive plant species in watershed management units.
3. Monitor watershed health.
4. Improve watershed management units via native biological diversity restoration.
5. Protect rare species within watershed management units through maintaining habitat and ecosystem health.
6. Prevent or suppress wildfires in watershed management units.
7. Strengthen community understanding and support for the protection and management of the East Molokai watershed.

Stephanie Dunbar-Co, *East Slope Watershed Start-Up Management Plan* 1-2 (Jan. 2014 draft).

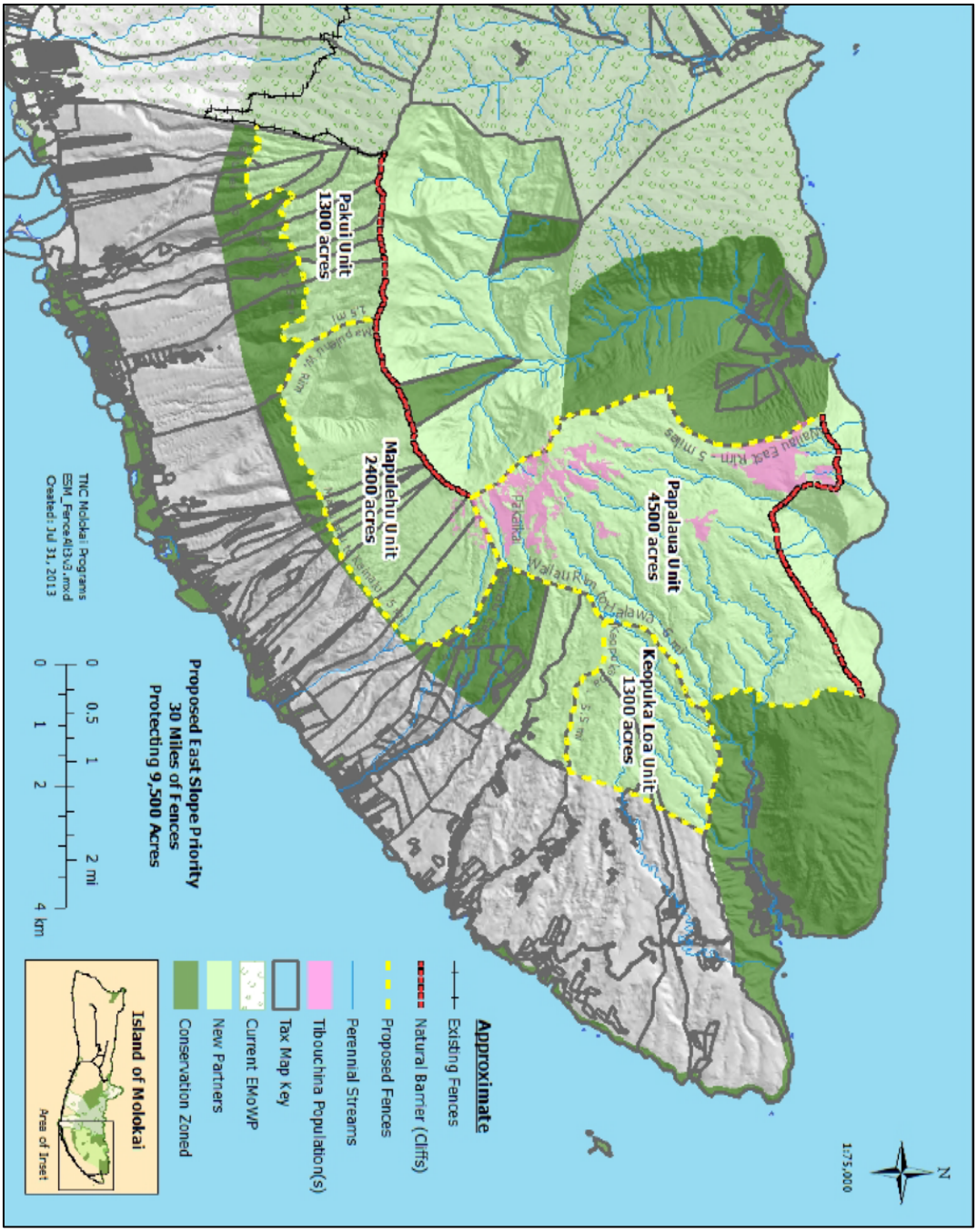
In the early stages of planning, the East Slope Management Plan proposed to erect four fencing units for watershed protection. These units were chosen because "they are hydrologically important, based on rainfall and surface water yields and … are classified as [State] priority watershed areas … contain[ing] the best remaining examples of intact, upland, native forest in East Molokai."[15] The proposed Management Units were prioritized as follows:

Table 2.1: Summary of Proposed Management Units from East Slope Management Plan

Unit	Estimated Size	Location (ahupuaʻa)	Notes from East Slope Management Plan
Pākuʻi	1,300 acres	Puaʻahala to Kaluaʻaha	Contains the most continuous, intact sections of native, mauka forest in the East slope.
Mapulehu	2,400 acres	Mapulehu to Pūniu ʻŌhua	Mix of native & degraded areas. A number of threatened & endangered single-island endemic species occur in the unit.
Keopuka Loa	1,300 acres	Honouli Maloʻo & Keopuka Loa	Makaʻeleʻele stream originates in this unit, which is the main source of freshwater for Hālawa residents. Pāpio stream provides water to Puʻu O Hoku Ranch. Mauka sections have intact native forest.
Pāpalaua	4,500 acres	Waialua to Hālawa	Owned entirely by Puʻu O Hoku Ranch. Too large, needs to be broken into sub-units. Forest health varies. Substantial degradation in Pakaikai, along eastern rim of Wailau, and behind Kahiwa Falls.

*It should be noted that the community input gathered for this report was based on these proposed four units. However, The Nature Conservancy (the implementers of the East Slope Plan), has since narrowed their focus to the first priority unit of Pāku‘i. This is in-line with what some kama‘āina informants recommended – that the plan should be implemented incrementally so the impacts of the first unit can be observed and then adjustments can be made as needed to the subsequent units.

Figure 3. Map of Proposed Management Units from East Slope Management Plan



Source: East Slope Watershed Start-Up Management Plan (January 2014 draft)

Background and community outreach efforts for East Slope Management Plan

Although this report is intended to gather community input on the East Slope Management Plan, this does *not* imply that EMoWP or TNC did not do community outreach, which they did. Instead, it is only intended to augment what they have done, including looking at aspects that are beyond their scope, such as the areas makai of the upper native forests. What follows is a brief summary of how the community has been involved, before and throughout the East Slope planning process thus far (provided by EMoWP/TNC).

- From 1999 to 2013 the EMoWP managed approximately 30,000 acres, including much of north and central Molokaʻi, and east to Kapualei (map below). The majority of the remaining native forest that is not being protected on Molokaʻi is located in Puaʻahala to Hālawa (the "East Slope") and provides a significant amount of the island's fresh water. Some Manaʻe mauka landowners wanted to see expanded protection of these native forests, so the EMoWP pursued the development of the East Slope Management Plan.
- The East Slope fenceline was first proposed to the community at the ʻAha Kiole o Molokaʻi meeting on April 2, 2013. Since that meeting, the EMoWP/TNC has worked with the ʻAha Kiole o Molokaʻi to put on and participate in five community meetings to present the project to the community and receive feedback.
- Since 2013, EMoWP has taken almost 40 community members on over 20 helicopter flights of the East Slope. They have met individually with over 50 community members (typically multiple times) to discuss the project.
- Since April 2013, information/updates and requests for participation in the East Slope planning process have appeared in Nature's NewsFlash, TNC Molokai's semi-annual outreach publication, which is sent to all post office and mailbox holders on the island.
- In May 2013, TNC initiated coordination of the Manaʻe Mauka Working Group (MMWG), a community group that was formed to help advise the East Slope planning process. The group is made up of 12 Manaʻe residents with long standing ties to the area, its people, and its resources. The group has held nine meetings thus far and continues to communicate regularly via meetings and/or email updates to discuss project details and provide community perspective.
- In October 2014, EMoWP/TNC coordinated an inter-generational community discussion on the East Slope Management Plan to provide community perspective and to help inspire others to be a part of this work. Billy Akutagawa, Malia Akutagawa, William "Tubz" Kalipi, Hano Naehu, Justin Luafalemana, and Heather Place participated. The discussion was filmed and is currently being aired on Akaku, Maui County's public access community television.
- Between November 2014 and January 2015, TNC developed and distributed outreach folders with easy to read information on the East Slope Management Plan (current status and future direction), EMoWP, TNC, resource protection, and requests for input and participation. Folders were first given to residents of the ahupuaʻa that make up the Pākuʻi Unit, and then handed out more broadly, directly engaging 90+ community members. Folders were intended to support previous one-on-one community interactions and reach community members who either didn't attend or stopped attending community meetings. Distributing folders usually led to casual opportunities to talk story about the project and get feedback.

Below are maps distributed in the most recent Nature's Newsflash, update as of October 2014, which as stated above, reflect EMoWP/TNC's immediate priority of the Pākuʻi Unit.

Figure 4. Map of East Molokai Watershed Partnership Partners and Native Ecosystems

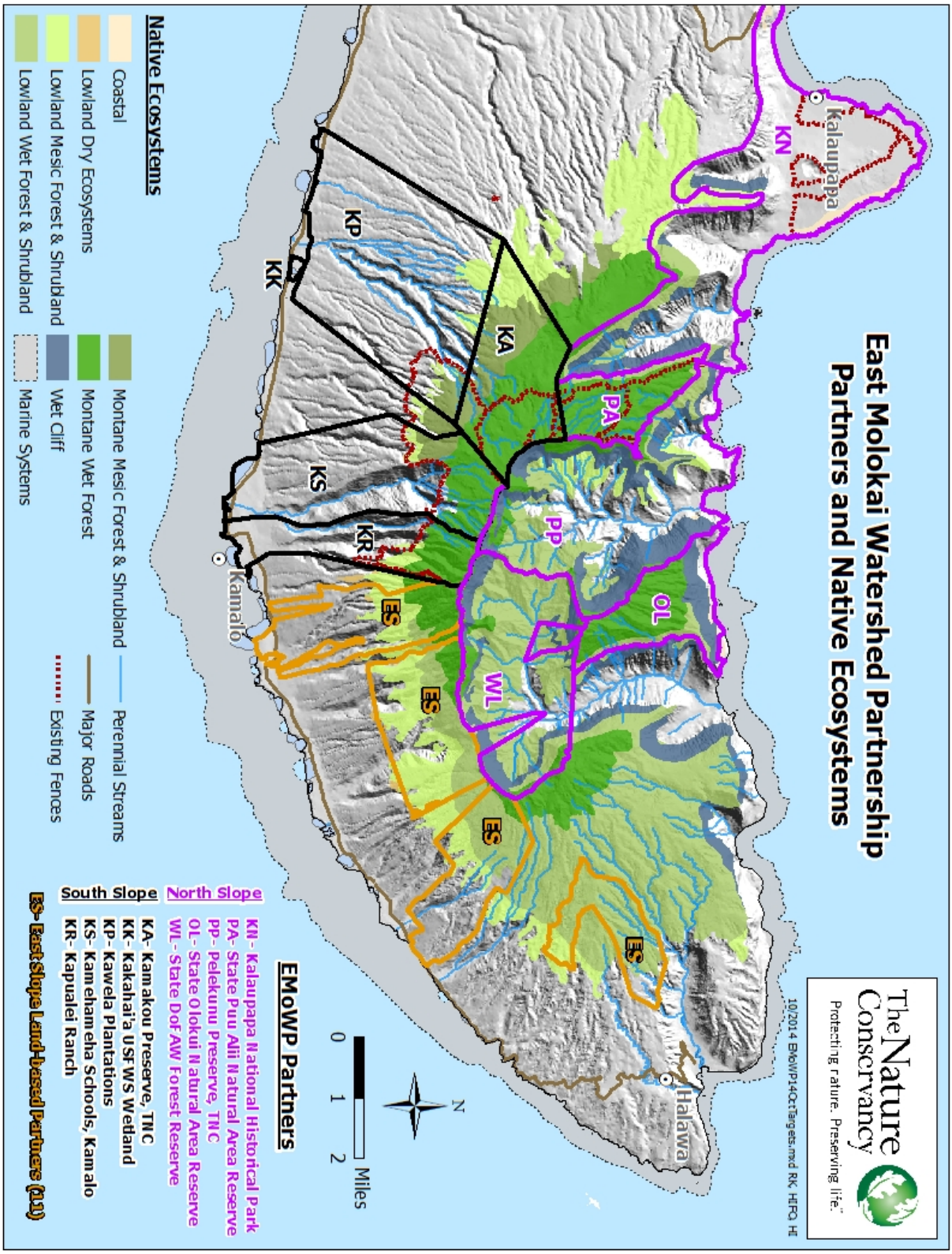
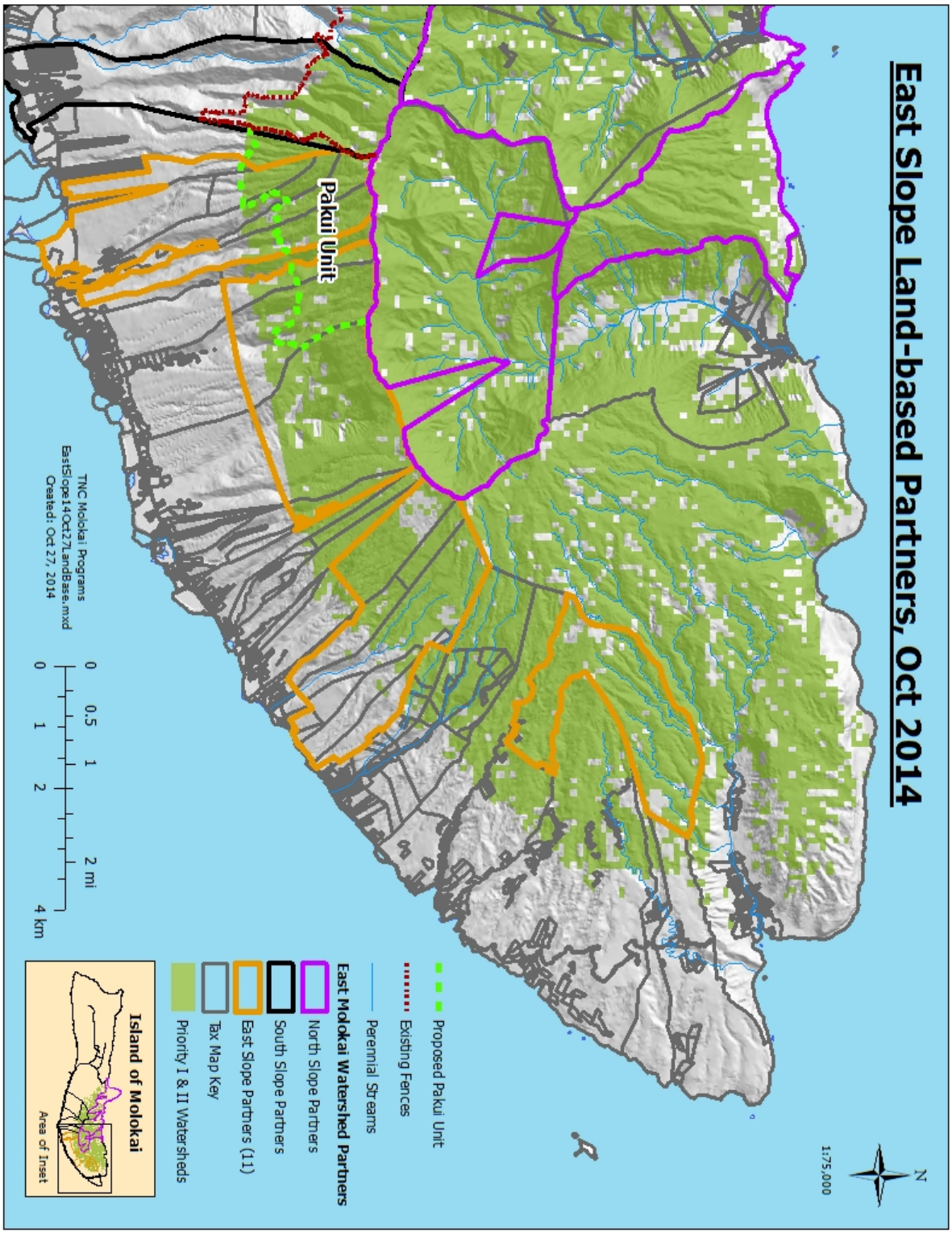


Figure 5. Map of East Slope Land-based Partners, October 2014



2.4. COMMUNITY REACTION & CONCERNS

What did the community ask for?

In November 2013, community members belonging to the ʻAha Kiole o Molokaʻi – Manaʻe Moku reviewed the draft East Slope Management Plan.[16] The ʻAha Kiole o Molokaʻi – Manaʻe Moku is an indigenous governance system for East Molokaʻi, and a branch of the ʻAha Kiole o Molokaʻi, which is part of the Statewide ʻAha Moku network that serves in an advisory capacity to the State Department of Land and Natural Resources (DLNR). The ʻAha Moku system is explained further in Section 4.1. At its November 26, 2013 ʻAha Kiole o Molokaʻi – Manaʻe Moku meeting, there was a general consensus amongst community members that something needed to be done to protect the watershed. Residents acknowledged that the proposed fence was a conservation tool, but expressed that they felt it was not the only tool for natural resource management.

While the ʻAha Kiole o Molokaʻi – Manaʻe Moku acknowledged that the proposed East Slope Management Plan was a good starting point, the ʻAha determined that a more comprehensive and integrated management approach was needed that not only protects the upper forested watershed, but addresses the interconnections between all natural and geographical elements of East Molokaʻi's multiple ahupuaʻa. The community requested a cultural management plan that acknowledges the ʻike kūpuna (ancestral knowledge) passed down through the generations of the ecological and cultural links found within each aspect of the ahupuaʻa from the mountaintop known as wao akua (sacred realm of the gods); to the wao kānaka (people's realm) that comprised the kula lands and hunting grounds; the loʻi irrigated by ʻauwai; the spring and stream-fed fishponds, limu beds, crab grounds, and estuaries; and the reef and nearshore fisheries. The community also urged that the cultural subsistence practices of long-time kamaʻāina families be documented as a foundation from which to address their protectable legal rights of access and mālama in accordance with hoaʻāina and konohiki-based traditional ecological knowledge (TEK) utilized in natural resource management.

A group of Manaʻe residents who oppose the proposed East Slope Management Plan and also feel that the ʻAha leadership within the Manaʻe Moku is predisposed towards supporting the expanded fenceline, convened separately to form Hui Aloha ʻĀina o Manaʻe ("the Hui"). While the Hui supports ahupuaʻa based management and the concept for a cultural management plan, they reject the ʻAha Kiole o Molokaʻi – Manaʻe Moku as a body that represents their concerns. Members of the Hui consider themselves to have the traditional ʻike to mālama their own ahupuaʻa irrespective of the ʻAha Kiole o Molokaʻi. This concept is generally in-line with kūpuna traditions that utilized the ʻike from ʻAha Ahupuaʻa, whereby by long-time ʻohana that held an intimate knowledge of their place and the resources therein oversaw the management of their own ahupuaʻa.

Specifically, members of Hui Aloha ʻĀina o Manaʻe oppose the expanded fenceline for the following reasons (what follows is a summary of their manaʻo):

- The existing Kamalō/Kapualei fence has created negative impacts to unfenced ahupuaʻa immediately east of this area. If more fencing is erected, but other areas left unprotected, ungulate migration will push further east and cause harm to these neighboring ahupuaʻa (e.g., spread of invasive plants, increased erosion and run-off into the streams and oceans). It has

also created a pathway just makai of the fenceline where ungulates travel. This new ungulate path/route has created additional erosion and run-off.

- An expanded fenceline will block access to subsistence hunters and gatherers from lands important to them. Native Hawaiian access rights will be threatened.
- Not all landowners have agreed to dedicate their conservation lands to the watershed partnership. Their non-participation jeopardizes ahupuaʻa that are left unfenced, such as the potential corridor between Waialua and the north shore, which includes the traditional Pākaikai.[17] The result will be that important cultural sites and wahi pana (sacred sites) will be destroyed by increased ungulate traffic. Moreover, important Manaʻe streams will be contaminated and human health will be compromised, especially for residents of Waialua, Honouliwai, Honoulimaloʻo, and Hālawa who rely exclusively on stream water for domestic and agricultural needs.
- The current proposed East Slope Management plan does not demonstrate a firm commitment to hire locally for conservation work and traditional ahupuaʻa management; to in-source local hunters exclusively for ungulate control; and to support small, home-grown businesses that could be utilized for purchasing native plant cultivars and other local enterprises that could benefit directly or indirectly by this project.
- The proposed East Slope Management plan is not ahupuaʻa-based, mauka-a-makai natural resource management. Rather, the watershed is narrowly and erroneously defined as the intact and diminished upper native forest. This type of management will not by itself restore the entire watershed and multiple ahupuaʻa of Manaʻe.
- Several members of the hui also harbor either a general or specific distrust and resentment towards large landowners. Hui members have communicated anger and frustration with large landowners who have called law enforcement authorities to arrest them for trespassing even though they are merely hunting and gathering for subsistence as an extension of hoaʻāina (ahupuaʻa tenant) rights. They are also frustrated with large landowners who have not been good stewards of the land: those who conduct ranching on steep slopes; degrade forest habitat; erode landscapes and cause flash flooding that destroys sensitive aquatic life such as oʻopu and hihiwai; divert water resources; grade, grub, and develop within sensitive ecosystems; and threaten ahupuaʻa resources critical to traditional subsistence.

Despite personal disagreements between community members and some distrust towards certain large landowners, it is apparent that the community, ʻAha Kiole or otherwise, individually or collectively, want and need a holistic ahupuaʻa-based management plan. It should be noted that while the East Slope Management Plan is intended to address the mauka watershed primarily, the implementer of that Plan, TNC, has expressed a willingness to work with other entities to incorporate their efforts into a larger mauka to makai watershed plan.

Thus, this report develops a framework for a community-based Subsistence and Ahupuaʻa Management Plan that incorporates the East Slope Management Plan, as well as the areas makai of that project area (also extending west to Kamalō, and along the north shore, from Hālawa to Pelekunu). This report aims to accurately reflect community manaʻo and inform government and public and private investors on what activities Manaʻe families support and consider culturally appropriate. It is our hope that the integration of Hawaiian traditional knowledge and practices; the free, prior, and informed consent of kamaʻāina families of Manaʻe; and their full participation in managing and caring for their ahupuaʻa are honored, respected, compensated, and valued in

tangible forms of exchange and collaboration to develop a stronger East Slope Management Plan, as well as a community-based Subsistence and Ahupuaʻa Management Plan.

2.5. METHODS EMPLOYED

2.5.1. Involvement of the University of Hawaiʻi's William S. Richardson School of Law Native Hawaiian Rights Clinic & Markline LLC

As discussed in the previous section, at the November 2013 ʻAha Kiole o Molokaʻi – Manaʻe Moku meeting, there was a general consensus by attendees that a more comprehensive ahupuaʻa-based watershed management plan was desired. Earlier that month, Malia Akutagawa, Assistant Professor of Law at the University of Hawaiʻi William S. Richardson School of Law and Hawaiʻinuiākea School of Hawaiian Knowledge, and her Fall 2013 Native Hawaiian Rights Clinic held a Traditional & Customary Native Hawaiian Rights Primer workshop[18] for the ʻAha Kiole. Because this legal information was shared (e.g., access rights and rights to mālama), the community requested assistance with assessing the impacts that the fencing project might have on native rights and practices. The attendees specifically wanted to know their legal rights with respect to subsistence and how to protect their ability to hunt, fish, farm, and gather.

The Office of Hawaiian Affairs (OHA), on behalf of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, also met with Chair William Aila of DLNR, Leimana DaMate, Executive Director of the Statewide ʻAha Moku Advisory Committee (AMAC), and specific staff charged with administering the Watershed Management Partnership program. These State agency representatives discussed the possibility of supplementing or expanding the scope of the East Slope Management Plan to include integrated, community-based management, mauka to makai, along the entire span of the multiple ahupuaʻa of the Manaʻe Moku. Recognizing that Molokaʻi is a cultural kīpuka, a rural and native stronghold of traditional subsistence practitioners, and that the ʻAha Kiole on Molokaʻi has been operating as a system of local governance and decision-making, these State agencies agreed to support a watershed management approach more consistent with Hawaiian konohiki resource governance and mālama practices of hoaʻāina.

At both the Manaʻe community's request and OHA's urging, Malia Akutagawa organized her law students ("clinicians") enrolled in the Spring 2014 Native Hawaiian Rights Clinic to focus on this project. The Clinic traveled to Molokaʻi in February 2014 to conduct interviews and focus group discussions among Manaʻe families and to map important cultural sites and areas for traditional subsistence. Care was taken also to collaborate with and exchange information with Stephanie Dunbar-Co, Principal Investigator for TNC and author of the East Slope Management Plan. At the end of the semester, the clinicians completed a rough draft of their preliminary findings and recommendations based on the interviews, focus groups, and intake data gathered. They provided sectional rough drafts of Chapter 4 of this report, summarizing common law decisions and State constitutional and statutory protections of Native Hawaiian rights relevant to specific traditional practices of kamaʻāina families of Manaʻe. Over the summer, Malia Akutagawa's legal research assistant, Shaelene Kamakaʻala did further edits and supplemented sections in Chapter 4 of the draft report. She prepared a powerpoint presentation of the Clinic's preliminary findings and recommendations for the Manaʻe community at its ʻAha Kiole o Molokaʻi – Manaʻe Moku meeting in August 2014.

The next step was to find funding to hire a professional planner to conduct additional interviews, get more intake forms completed, and to finalize this report. Harmonee Williams of Markline LLC was contracted by OHA to complete this work. She is an environmental and community planner residing on Molokaʻi. She has authored and co-authored several community plans, needs assessments, and resource guides with various community groups on Molokaʻi.[19]

Malia Akutagawa agreed to remain on the project pro bono as a legal consultant and traditional knowledge holder to fulfill her personal kuleana as a Molokai-born kamaʻāina raised in Manaʻe with long-held genealogical ties to this ʻāina. Her knowledge of the land, relationships and connection to many of the ʻohana of Manaʻe, and neutral approach with respect to gathering and accurately reporting community manaʻo have helped to diffuse some of the internal conflicts and distrust existing between families belonging to Hui Aloha ʻĀina o Manaʻe, members of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, and conservation-minded proponents of the proposed fenceline. Malia worked with Harmonee to edit and finalize all chapters.

The following sub-sections provide greater detail as to the methods utilized to compile this report.

2.5.2. Outreach, Interviews, Mapping, Meetings & Presentations

The planning team of the Native Hawaiian Rights Clinic and Markline LLC combined efforts to do extensive community outreach throughout 2014. Malia Akutagawa and her law clinicians traveled to Molokaʻi from February 14-16, and with Harmonee Williams, conducted community interviews and gathered manaʻo from key informants (kamaʻāina and other experts). Over 70 informants from Manaʻe were identified and contacted. The list of interviewees was also compiled with the assistance of Stephanie Dunbar-Co of TNC. Of the 70 individuals contacted, 27 were able to commit the time to meet in February during the 3-day period that the Clinic and Harmonee Williams were able to conduct interviews and focus group sessions. Follow-up interviews with other ahupuaʻa informants were also conducted by Malia Akutagawa and Harmonee Williams between August and December, for a total of 44 informants (this includes individual interviews, focus groups, and those who filled out intake forms).

In order to ensure that the informants represented the entire Manaʻe moku, care and due diligence were taken to identify and contact key individuals and ʻohana from the many ahupuaʻa throughout the moku who possess extensive knowledge of their ʻāina. These informants included subsistence hunters, gatherers, lāʻau lapaʻau (Hawaiian medicine) practitioners, lei makers, lawaiʻa (fishermen), mahiai (farmers), kiaʻi loko (fishpond experts), limu (seaweed) gatherers and cultivators, traditional artists crafters and sculptors who carve kiʻi, weave lauhala, and make kapa, kūpuna, and other ʻike (traditional knowledge) holders. It should be noted that those interviewees who are kamaʻāina are specifically referred to as "kamaʻāina informants" because the law recognizes kamaʻāina expertise in authenticating customary practices that also qualify as statutorily and constitutionally protected rights.[20] In addition, the planning team understood that kamaʻāina knowledge is key to creating a plan like this since kamaʻāina possess intimate knowledge of their place and are vital to maintaining ahupuaʻa health.

The key informants are listed below. As stated above, the majority are kamaʻāina informants. In addition, experts on native species related to terrestrial, marine, and aquatic environments were interviewed as well. Relevant excerpts from these interviews are included throughout the report, but kept anonymous. Notes from the interviews will be kept on file with OHA.

Key Informants (including Kamaʻāina Informants and other experts):

1. Clinton Akiona
2. William M. Akutagawa, Jr.
3. Robert "Bobby" Alcain
4. Lori Buchanan
5. William Caster
6. Eric Co
7. Frances Maka Cobb-Adams
8. Jeffrey Davis
9. Tracy Ann Davis
10. Stephanie Dunbar-Co
11. Sonny Dunnam
12. Steven Eminger
13. Alapai Hanapi
14. Mililani Hanapi
15. Raymond B. Kalilikane, Sr.
16. Allen Kalima
17. Mary Ipolani Kalima-Moses
18. Bronson "Duke" Kalipi
19. William "Tubz" Kalipi, Jr.
20. Zaidarene "Toochi" Kalipi
21. Russell Kallstrom
22. April Kealoha
23. Billy Kekahuna
24. Zallarina Kekahuna
25. Justin Luafalemana
26. Vernette "Penny" Rawlins Martin
27. Steven Moses
28. Guy Hanohano Naehu
29. Palmer Naki
30. Raymond "Leimana" Naki
31. Walter Naki
32. Mary "Hala" Pale
33. Peter Pale
34. Lacey Leiala N. Phifer
35. Milton Place
36. William K. Puleloa
37. Kalaniua Ritte
38. Loretta Ritte
39. Walter Ritte
40. Gandharva Mahina Hou Ross

41. Tammy Lynn Ross
42. Charlotte Leinaʻala Kaʻahanui Seales
43. Edward "Eddie" Tanaka
44. Matt Yamashita

Legal Clinic, Malia Akutagawa, & Harmonee Williams conducting interviews with Manaʻe Kamaʻāina Informants, February 2014

Photos by Oliver Manglona, Legal Clinician

The process to interview the kamaʻāina informants consisted of asking them to (1) fill out an Intake Form; (2) share their manaʻo regarding the resources and traditional and customary practices of Manaʻe, the proposed East Slope Management Plan, and how their moku should be managed (see questions below); and (3) map important sites.

The Intake Form utilized many of the questions from the 1994 *Governor's Molokaʻi Subsistence Task Force Study* as a template and baseline to provide comparative value. These forms collected data on informants' employment; household income; household size; level of education; ethinicity; place of birth; ahupuaʻa and moku of residence; identification of additional ahupuaʻa in Manaʻe which they have ancestral and genealogical ties; how they define subsistence and whether they engage in subsistence activities; how important subsistence is to them; what, when, and from which ahupuaʻa they gather ocean, stream, and mountain resources; plants or crops they grow and animals they farm; whether they support, oppose, or have concerns about the proposed fencing project; and what additional local and traditional strategies they recommend for resource management and watershed restoration. A sample of the Intake Form is provided in *Appendix A*.

The following interview questions and other follow-up questions were asked as appropriate:

1. What are some critical areas for Native Hawaiian traditional subsistence (fishing, hunting, ocean and land gathering, farming) and spiritual, religious, and ceremonial activities? (You may also indicate this information on the map)
2. What are some of the mele (songs), ʻoli (chants), moʻolelo (stories), significant place names, wind names, etc. about Manaʻe that are key to cultural understanding of the ʻāina?
3. What are some of the values and traditions passed down from your makua and kupuna re: how to treat the ʻāina, plant, harvest, and mālama the resources?

4. Do you feel that the proposed watershed management plan, including fencing of the upper areas of the native forest, is consistent with those traditional values and practices that you learned and pass down to the next generation? Do they fit within your understanding of traditional ahupua'a access and management?
5. What needs to be done to renew, maintain, and perpetuate traditional subsistence, religious, spiritual, and ceremonial practices in Mana'e for future generations?
6. What do you see your role being in the mālama of Mana'e?
7. Do you see yourself, your 'ohana, and the community-at-large taking an active role alongside formal conservationists and their work to restore the watershed of Mana'e? If so, what would that role be? How can the community co-manage the resources? How would you add to or amend the present draft watershed management plan?

Kama'āina informants also participated in a mapping exercise with a coded symbols and color pencils to identify traditional agriculture and food production sites (e.g., lo'i kalo and fishponds); general areas important for land, stream, and ocean gathering; ko'a (fishing grounds with corresponding land markers) and fisheries; major hunting areas; and important wahi pana (sacred sites) and trails critical to access, religious and ceremonial uses, and subsistence practices. Understanding the sensitive nature of special fishing and hunting grounds and places for gathering, kama'āina informants were informed that they had the following options:

- To not provide mapping information as a way to preserve confidentiality.
- To put a notation of a generalized area for subsistence practices that would not reveal specific locations of secret fishing, hunting, and gathering spots.

In addition, the purpose of the mapping exercise was explained, which was to indicate important traditional use zones for access, subsistence, and religious and ceremonial practices; especially where kama'āina express concerns that the proposed East Slope Management Plan could potentially impact these areas.

Mapping Exercise, February 2014

Photo by Oliver Manglona, Legal Clinician

2.5.3. Legal Analysis & Recommendations

Students participating in the Native Hawaiian Rights Clinic compiled the data gathered from the intake forms, mapping, and kamaʻāina interviews to determine the extent to which Manaʻe families rely on natural and cultural resources for traditional subsistence and religious practices. These practices were also analyzed within the context of statutory, constitutional, and common law protections of Native Hawaiian rights to not only access important biocultural resources but to mālama these resources and the ʻāina that sustains Manaʻe families and their culture. Groups of clinicians were assigned to draft sections of the report that covered specialized areas of Native Hawaiian rights law; they include:

- **ʻAha Moku and Traditional Resource Management**
- **Sources of Native Hawaiian Rights Law**
- **Trails and Traditional Access**
- **Native Burials and Historic Sites Preservation**
- **Water Rights and the Public Trust Doctrine**
- **Subsistence Hunting – An Emergent Cultural Practice and Right**
- **The Value of Integrating Traditional Ecological Knowledge (TEK) in Natural Resource Management**

This analysis comprises Chapter 4, whereby Malia Akutagawa and the law clinicians provide a detailed discussion of the legal rights and protections available to the Manaʻe community.

Lastly, the planning team documented, compiled, and reported the findings and recommendations. The findings are described and illustrated in Chapter 3 of this report. Chapter 5 then provides a more detailed discussion of the recommendations provided by the cultural informants, analyzed by the Law Clinic, and synthesized by Markline LLC. It should be noted that a significant portion of the writing of Chapter 4 and edits to the initial Clinic report were done during the summer of 2014 and throughout 2015 by Shaelene Kamakaʻala, a Research Assistant and law student enrolled in an independent study project with Malia Akutagawa. Additional guidance, research, and writing was provided by Malia Akutagawa throughout the process.

2.5.4. Meetings & Presentations

OHA Meeting – August 5, 2014

On August 5, 2014, Malia Akutagawa, her law students Shaelene Kamakaʻala and Keani Rawlins-Fernandez, and Harmonee Williams of Markline LLC attended a meeting with the Office of Hawaiian Affairs ("OHA") and members of Hui Aloha ʻĀina o Manaʻe. The meeting was hosted by OHA with Molokaʻi/Lanaʻi Trustee and former Board Chairperson Colette Machado, OHA Senior Public Policy Advocate Jocelyn Doane, OHA Community Outreach Coordinator Gayla Haliniak-Lloyd, and University of Hawaiʻi Department of Ethnic Studies Professor Davianna McGregor present. Those present from the Hui included Harry Ann Aki and her husband *(did not sign in),* Gandharva Mahina Hou Ross and his wife Tammy Lynn Ross, Raymond "Leimana" Naki, and Shaeralee Manosa.

The purpose of the meeting was to address concerns that were raised by the Hui to OHA in regards to the East Slope Management Plan, the involvement of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, the role played by Malia Akutagawa and the Native Hawaiian Rights Clinic, and the qualifications of Harmonee Williams of Markline LLC.

Most of the Hui members present had already been interviewed by the Clinic earlier in the year (February 2014). However, due to a growing distrust of the ʻAha Kiole o Molokaʻi core leadership, the representatives of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, and some of the watershed management partners (some large private landowners), the Hui were also skeptical about OHA's contract with Markline LLC and the role of Malia Akutagawa and her Native Hawaiian Rights Clinic. The Hui seemingly misunderstood the intent of drafting a community-based subsistence and ahupuaʻa management plan; that it was undertaken largely to fulfill the Hui's own request for a more comprehensive, traditional and integrated management strategy that engages community in the work. All of these issues were discussed, as was the process to hire Markline LLC, and OHA's strict procurement and bidding process to do so.

Malia Akutagawa shared with the Hui some of the Clinic's preliminary findings and recommendations that addressed some of their main concerns about the proposed East Slope Management Plan. Hui members expressed appreciation of these findings and recommendations and acknowledged that their manaʻo was accurately reflected in the Clinic's report. Malia Akutagawa encouraged Hui members to also attend the Clinic's full presentation scheduled for that evening before the ʻAha Kiole o Molokaʻi – Manaʻe Moku and also provided a digital copy of the presentation to one of its members. Some of the Hui members decided to attend and expressed positive feedback. Chair Machado was also invited and attended the Clinic's presentation to get the full scope of the Clinic's work and findings.

Since that time, members of the Hui have directly contacted Malia Akutagawa and Harmonee Williams to provide additional manaʻo. Thus, several more interviews with Hui members have been conducted at their homes. Finally, the authors participated in a site visit to Ka Ulu Kukui o Lanikaula to learn about this sacred wahi pana and its important historic role in sustaining the Manaʻe watershed.

Clinic Presentation to the ʻAha Kiole o Molokaʻi – Manaʻe Moku on August 5, 2014

The Law Clinic's presentation to the ʻAha Kiole o Molokaʻi – Manaʻe Moku had a relatively low attendance (approximately 15), but the preliminary findings and recommendations were well received by those who did attend. Long-standing issues between the Hui and the ʻAha Kiole o Molokaʻi – Manaʻe Moku were discussed, and Hui members in attendance expressed a renewed hope and desire to participate in the ʻAha process and provide ahupuaʻa leadership on the council. The Native Hawaiian Rights Clinic officially ended in May 2014 and completed its final deliverables through this presentation and a preliminary report. Malia Akutagawa re-committed herself to remain involved in the process; to provide assistance to Harmonee Williams in conducting future interviews; to cultivate greater trust in the process and mediate any potential tensions that may arise in the future given the sensitive nature of relationships within the Manaʻe community; and to assist in writing and editing the final plan, particularly the legal section (Chapter 4).

[5] *A Mau A Mau*, *supra* note 1.
[6] However, in ancient times, the Kawela (Kona) moku included Kamalō ahupuaʻa and several ahupuaʻa west of Kamalō into the area that is known as Kaunakakai today. This is a dry part of the island. The landscape was not as arid as it is today. The introduction of ungulates (cattle, deer, and goat) have transformed and eroded the landscape. Whole-scale water diversions by Molokai Ranch from Kawela to Kaunakakai and in the Palaʻau region to feed west Molokaʻi lands have also altered the landscape and impacted the productivity and health of watersheds in Kawela moku. These events have altered colloquial understandings of moku or districts demarcations on Molokaʻi. Today, Manaʻe is known to the people as including the ahupuaʻa of Kamalō where the air first becomes distinctly cooler and the landscape begins to green.
[7] HAWAIʻI ASSOCIATION OF WATERSHED PARTNERSHIP, http://hawp.org/partnerships/ (last visited Dec. 29, 2016).
[8] *Id.*
[9] Stephanie Dunbar-Co, *East Slope Watershed Start-Up Management Plan* 3 (Jan. 2014 draft).
[10] Interview by Harmonee Williams with Russell Kallstrom, Stephanie Dunbar-Co & Wailana Moses, Staff, The Nature Conservancy Molokai, in Hoʻolehua, Haw. (Dec. 18, 2014).
[11] Dunbar-Co, *supra* note 9.
[12] *Id.* at 5.
[13] *Id.* at 5-10.
[14] *Id.* at 10.
[15] *Id.* at 18.
[16] The Aha Kiole o Molokaʻi, which oversees all councils on Molokai, has a list of those individuals who have officially registered as members. This does not, however, preclude non-members from participating in ʻAha Kiole meetings. Any reference to "ʻAha Kiole o Molokaʻi – Manaʻe Moku members" reflects those who are actually registered. However, in more general terms, "the Moku" refers to those residing within that moku. Thus, any reference to "Manaʻe community" indicates residents geographically located within Manaʻe who may or may not be registered as official members.
[17] It should be noted that today, Pākaikai is commonly used to refer to a hunting area that abuts the back eastern bowl of Wailau Valley, which differs in location from the traditional Pākaikai (Kamehameha nui's birthplace).
[18] An informative workshop on the laws protecting Iwi Kūpuna and Hawaiian Traditional and Customary Rights, was conducted by Malia Akutagawa, Associate Professor of Law with Ka Huli Ao Center for Excellence in Native Hawaiian Law, University of Hawaiʻi at Mānoa, William S. Richardson School of Law. The workshop was sponsored by the Office of Hawaiian Affairs for the benefit of Kānaka Maoli communities throughout the islands.
[19]Authored and co-authored works by Malia Akutagawa include: *Molokaʻi Energy Needs Assessment* (2014), *Molokaʻi Go Local! Business Directory* (2014), *Sust ʻāina ble Molokai Resource Guide* (2009), *Mapulehu Glass House Feasibility Study* (2009), *Molokai Future of a Hawaiian Island* (2008), *Manaʻe GIS Mapping Project* (2008), and Ka Honua Momona, Int'l (KHMI) *Fishpond Management Plans* (2006-2010).
[20] In re Application of Ashford, 50 Haw. 314, 440 P.2d 76 (1968).

3. FINDINGS

3.1. IMPORTANCE OF SUBSISTENCE TO MANAʻE RESIDENTS

The island of Molokaʻi is historically known as "ʻĀina Momona" (Abundant Land or Land of Plenty), referring to the bounty of food that was produced on its fertile and fruitful lands.[21] The name honors Molokaʻi as the land of "fat fish and kukui nut relish." The "fat fish" are raised in the many loko iʻa (fishponds). The "kukui nut relish" is used to flavor the fish and speaks to the abundance of lush resources of Molokaʻi. Because these resources were so plentiful, chiefs of Maui and Oʻahu often fought for control of the island.[22] Manaʻe in particular was home to 35 of Molokaʻi's 53 fishponds, as well as forty lush valleys, well-suited for growing taro, sweet potato, and other vegetables.[23]

These resources continue to be available today, even if they are not as plentiful. Manaʻe is documented to be one of the most intact cultural and subsistence landscapes within Hawaiʻi.[24] Many Manaʻe families continue to rely upon subsistence fishing, hunting, gathering, and/or cultivation for a significant portion of their food. The *Governor's Molokaʻi Subsistence Task Force Study* (1994) reported that twenty-eight percent (28%) percent of Molokaʻi families' food was acquired through subsistence activities, and thirty-eight percent (38%) among Native Hawaiian families.[25] A strong continuation of traditional and cultural practices was expressed throughout many of the interviews conducted for this TCP Report, from hunting deer, to catching fish, to gathering flowers to make lei, to mālama of heiau. Details of those practices are described and documented in the following sections. This chapter then summarizes the manaʻo shared by community members, including kamaʻāina informants and other experts, on the overall watershed health of Manaʻe and on the proposed East Slope Management Plan, as well as the potential impacts of these issues on their ability to carry out those traditional and customary practices. As stated previously, manaʻo from these informants is shared throughout this report, but is kept anonymous. (A list of key informants can be found in Section 2.5, on pages 18-19.)

An overwhelming number of kamaʻāina informants shared the sentiment that subsistence is "Very Important" for their family on their Intake Forms.[26] As described in the Methods (Section 2.5) of this report, these informants were asked to fill out an Intake Form in order to document the amount and location of subsistence practices occurring in Manaʻe. The following two tables summarize that information. The first is entitled "Manaʻe Resource Usage Data by Ahupuaʻa" (Table 3.1), which tabulates the number of informants who reported doing various subsistence activities, and in which ahupuaʻa. As shown, every ahupuaʻa in Manaʻe was identified as having various cultural, religious, and subsistence values, which indicates the extent and level of dependence that Manaʻe residents' subsistence lifestyle has on the area's resources. The second table, "Vital Subsistence Resources in Manaʻe Moku" (Table 3.2), lists the species and kinds of fish, plants, animals, stream life, ocean resources, etc. that are currently gathered, fished, hunted, and/or farmed by the 30 kamaʻāina informants that completed an Intake Form.

It is clear that the entire moku of Manaʻe is essential to the subsistence lifestyle of its community and island residents. At the same time, the people of Manaʻe have witnessed a significant decline in the health and abundance of its ahupuaʻa resources, mauka to makai. Thus, any proposed conservation approach must take into account the impacts of the strategy, with a particular focus on the impacts to the subsistence lifestyle of Manaʻe residents.

Table 3.1: Manaʻe Resource Usage Data by Ahupuaʻa

Informants' responses to the question: Within Manaʻe, which ahupuaʻa do you access for traditional, religious, ceremonial purposes and/or to gather, fish, farm, and/or hunt for subsistence?								
Ahupuaʻa Name	**Religious & ceremonial practices**	**Hunting**	**Land gathering**	**Stream gathering**	**Fishing & ocean gathering**	**Farming, Gardening**	**Fishpond, aquaculture**	**Raising livestock**
Kamalō	2	9	7	1	13	2	1	1
Kapualei	1	6	5	1	6	2	1	1
Kumueli	1	3	4		5			
Wawaia	1	3	4		5			
Puaʻahala	1	6	5	1	7	1		1
Kaʻamola	2	8	8	1	10	4	3	2
Keawanui	2	8	5	1	9			
West ʻOhia	2	8	6	2	7	1	1	1
East ʻOhia	2	8	6	2	7	2	1	1
Manawai	1	7	5	1	6	1		
Kahananui	1	9	6	1	6			
ʻUalapuʻe	2	10	6	2	9	2	2	1
Kaluaʻaha	1	8	5	1	7	3		1
Mapulehu	3	11	6	1	12		1	1
Punaula	1	4	4		5			
Pukoʻo	2	5	3		10		2	1
Kupeke	1	5	3		7		1	
Ahaino 1	1	4	2		5			
Ahaino 2	1	4	2		5			
Kailiula	1	3	2		5			
Honomuni	1	6	2		6			
Kawaikapu	1	7	2		8			
Kainalu	1	6	3		7			
Puniuohua 2	1	5	3		6			
Puniuohua 1	2	5	3		7	1		1
Waialua	2	5	4		9			
Moanui	4	5	5	1	9	1	1	
Kumimi	4	5	4	2	9	2		
Honouliwai	3	6	4	2	11	1	2	
Honoulimaloʻo	2	5	3	1	9	1		
Keahuoku	1	4	3		6			
Lupehu	2	4	4	1	9	1		
Pohakupili	2	4	4	1	8	1		
Moakea	2	4	4	1	6	1		
Keopukauuku	2	4	4	1	6	1		
Keopukaloa	3	5	5	1	6	1		
Koaliʻi	2	5	3	1	6	1		
Hālawa	5	7	8	8	12	1		
Wailau	3	5	8	8	9	1		
Pelekunu	3	3	5	6	8			

*This table shows that, based on the input of the 30 kamaʻāina informants that completed an Intake Form, every ahupuaʻa in Manaʻe is important for cultural, religious, and/or subsistence practices. The table shows that every ahupuaʻa is utilized and it only takes one individual to have standing to assert their rights and warrant legal protections for those rights. It should be noted that this table does not encompass every individual in Manaʻe or Molokaʻi that engages in these practices, only those that filled out an Intake Form.

Table 3.2: Vital Subsistence Resources in the Manaʻe Moku

Religious & ceremonial practices	Hunting	Land Gathering	Stream Gathering	Fishing & Ocean Gathering	Farming & Gardening	Fishpond/ Aquaculture	Raising Livestock
**cultural informants participate in various religious & ceremonial practices in Manaʻe, but they were not asked to specify what their practices are.*	- Axis Deer -Black buck - Goats - Pigs	ʻAʻaliʻi ʻĀhinahina Ahuhu ʻĀkala Alaheʻe ʻAloe ʻAwa Guava Hala Hāpuʻu fern Hau Haʻoui Hōʻio ʻIliahi (scarce) ʻIlima Kaunaʻoa Kī Kiawe Koa Koali Koʻokoʻolau Kope Kou Kukui Laukahi Liko/Lehua Lilikoʻi Loulu Maiʻa Maile Māmaki Māmane Mangrove Maunaloa Milo Moa Niu Noni Oranges Pakalana Papaya Paria Pepeiao Papaya Pīkake Plum Pōpolo Puakenikeni Squash	Āholehole ʻAmaʻama Crabs (some) Hīhīwai (scarce; rarely) ʻŌpae ʻOʻopu Prawns Pūpū	Reef fish ʻAhi Akule Āholehole ʻAmaʻama Awa Aweoweo Crab/Pāpaʻi (ʻAʻama, Black crab, Blue pincher, Samoan) Enenue Hāʻukeʻuke Heʻe Hīnālea Kākū Kala Kawakawa Kūpeʻe Kūpipi Kole Kumu Lai Leho Limu (all types; ʻEleʻele, Huluhuluwaena, Kohu, Lipeʻe, Manauea, Ogo, Pālahalaha, Wāwaeʻiole) Loli Mahimahi Mamo Manini Menpachi Moana Moi Mu ʻŌʻio Onaga Ono ʻŌpae ʻŌpakapaka ʻŌpelu ʻOpihi Paʻakai Palani Pipipi	ʻAloe ʻAwa Avocado Chili pepper Fig Gandule Green onion Guava Herbs Hwn. Orange Honohono grass Kale Kalo (poi and luʻau leaf) Kī Koʻokoʻolau Kukui Lāʻī Lemon Lemon-grass Lettuce Lūʻau Luffa Macademia nut Maiʻa Māmaki Mango Mountain apple Malunggay Niu Noni Okra ʻŌlena Papaya Pōpolo Sour sap Starfruit String beans Tangerine Tomato ʻUala ʻUhaloa ʻUlu	**cultural informants participate in fishpond practices in Manaʻe, but they were not asked to specify what their practices are.*	Cows (meat) Eggs Fighting cocks Goats Pigs Rabbits

Table 3.2: Vital Subsistence Resources in the Manaʻe Moku (continued)

Religious & ceremonial practices	Hunting	Land Gathering	Stream Gathering	Fishing & Ocean Gathering	Farming & Gardening	Fishpond/ Aquaculture	Raising Livestock
		Lāʻī ʻUhaloa ʻUlu Hawaiian oranges *Gather seeds from wild fruits/plants		Pāpio/Ulua Rainbow runner Shells Taʻape Toau Uhu Ula Uouoa Wana Weke	Wāpinē Wiliwili		

*This table shows the species and kinds of fish, plants, stream life, ocean resources, etc. that are currently fished, hunted, gathered, or raised by the 30 kamaʻāina informants that completed an Intake Form. It should be noted this table does not capture every species in Manaʻe that is important for cultural, religious, or subsistence practices, but only those identified by the informants that participated in this process. Also, it was recommended that in the future (i.e., in the Subsistence & Ahupuaʻa Management Plan) such a table include Latin names for species.

The information in these two tables, gathered from kamaʻāina informants, provides a good indication as to how widespread traditional and cultural practices are in Manaʻe. It is critical that this type of information be communicated clearly throughout any conservation efforts so that such resources and practices can be recognized and protected. It is also vital that practitioners know their rights and act to protect them. This will be discussed in more detail in the legal section of this report (Chapter 4). In short, both practitioners and conservationists need to acknowledge what traditional and customary practices exist in Manaʻe today, and then cooperatively decide how to best manage the area with cultural and traditional resources and rights in mind.

The following sections describe these cultural and subsistence resources in more detail. This information is based on input from those who participated in this process. As conservation efforts progress, individuals from each ahupuaʻa should participate to ensure all important resources and practices are identified and considered. It should be noted that TNC will be conducting a Cultural Impact Assessment (CIA) and an Environmental Assessment (EA) for each unit proposed, beginning with the Pākuʻi Unit (underway in 2015-16). That process should result in a more thorough identification of natural and cultural resources.

3.2. SIGNIFICANT CULTURAL SITES AND TRAILS

"Pana" – to pulsate, throb, like that of a heartbeat. So intelligently combined with the term "wahi," to refer to a legendary place or more precisely, places that live through our memory. Wahi pana are those that flourished because of the inhabitants who dwelled there, our kūpuna, but perhaps more importantly allowed those who lived within them to prosper. Scholar Noʻeau Peralto asserts,

> It has been said that we are all branches of the genealogical trees established long ago by our kūpuna who birthed us in to existence. I ulu nō ka lālā i ke kumu. Nourished and sustained by the many piko that connect us to those kūpuna who came before, we, indeed, are the living embodiments of the sacrifices of their labor.[27]

It is because of this realization that the concept of aloha ʻāina was and is manifested in the lives of Kānaka Maoli (indigenous Hawaiians) everywhere. Samuel Elbert recounts the abundance of aloha ʻāina sayings in the fact that they can be found in moʻolelo, mele, moʻokūʻauhau, etc. Elbert states, "they name illustrious chiefs and places, important rains, seas, winds, and distinctive features."[28] The use and knowledge of such place names are the epitome of aloha ʻāina and strengthen our connections to our glorious past. These types of resources have been identified as "essential for the expression and perpetuation of Hawaiian culture, religion, and language."[29]

This section provides a brief description of just some of the multitude of historical and cultural sites identified, along with concerns and possible effects that the fencing project may have on Manaʻe's historical sites and burials. Section 4.4 sets forth legal protections for historic sites and burials, along with a preliminary recommendation for the Manaʻe community to ensure maximum legal protections are followed and respected.

The following descriptions and associated map are not meant to provide a comprehensive identification of all cultural sites, rather it is intended to show that amongst the 40+ kamaʻāina informants, a multitude of such sites are still in existence today throughout the entire Manaʻe moku, and warrant the attention and protection of those involved in work that may pose a threat to these sites. With that in mind, some examples of historical and cultural sites that were identified include:

Heiau:

- Pākuʻi Heiau – part of a larger complex of the heiau called Ka Hokukano, located within the Manawai and Kahananui ahupuaʻa. A kamaʻāina family has been cleaning and caring for this heiau complex for many years. A dream was re-counted by a kupuna of stars above these heiau, which may be connected to the name Ka Hokukano (hoku meaning stars). Pākuʻi was specifically noted by the late Kumu Hula John Kaimikaua as the site where a prophecy about the future of the Hawaiian people and the islands was made at the time when the edict abolishing the ʻai kapu was issued by Kaʻahumanu and Liholiho. Kaʻahumanu's soldiers traveled to every island to enforce the edict. When they arrived on the shores of ʻUalapuʻe, a mock battle ensued. The kahuna who cared for the Pākui heiau were said to have moved the kiʻi and artifacts from the heiau and sealed them in a cave somewhere in the ahupuaʻa of ʻŌhia. When Kaʻahumanuʻs soldiers arrived to burn down the heiau, the kahuna prophesied at Pākui that the high born would fall, and the land and the Hawaiian people would suffer, and that it would be the people of the land that would rise once more to restore pono (goodness, righteous). It is said that we are living in that time now, as marked by the beginning of a Hawaiian Renaissance (restoration of the language, non-instrument navigational voyaging, the aloha ʻāina movement, etc). A resounding chant in the prophecy is "Hōʻale ka lepo popolo." Lepo popolo is a metaphor for the common people of the land who rise out of the taro patch with mud on their legs.

Hōʻale represents the highest reach of the wave as it crests. Kamaʻāina of that area speak of the numerous heiau as comprising a kino (body). With the head, shoulders, upper torso along the mountain and upper lowlands, and the feet located in the ocean as a circular platform. Fishermen recount that this heiau "walks" or travels, and can be seen in one place during a certain time of the year, and then gone when they return to the area, only to show up again at a later time.

- A kapa making heiau in Manawai indicates the presence of wauke in the area, helping to identify important resources to protect or restore. It is a heiau exclusive to women and the making of kapa.
- ʻIliʻiliʻōpae Heiau – Located in the Pūkoʻo area, ʻIliʻiliʻōpae is known as the second largest heiau throughout Hawaiʻi. There are many moʻolelo about this sacred place.
- Another heiau, located adjacent to the streambed, has a pit (imu) where a chief from Oʻahu was killed. It was recounted that his body was burned there.
- A fishing heiau was identified mauka of the main road in Kaʻamola by a local family that has been cleaning and caring for it for many years.
- An agricultural heiau and an ocean heiau were identified in the ahupuaʻa of Kaluaʻaha.
- Certain heiau and ahupuaʻa boundary markers may have been destroyed by heavy equipment operations, according to a kamaʻāina informant. One such stone formation that was destroyed was described to have the face of a mahi-mahi fish. The kapa heiau may have been partially destroyed by the heavy equipment as well.
- There are numerous other heiau within Manaʻe. Some have been identified by the State Historic Preservation Division (SHPD). Additional heiau were identified in the *Manaʻe GIS Mapping Project* (County of Maui, 2008). Still others are known, but were not identified for protection.

Loʻi Kalo, Important Water Sources, Pristine Forested Areas, and related resources:

- The ahupuaʻa of Honomuni is significant because of the large loʻi kalo (irrigated terraces for taro) established by the Mōʻī, King Kamehameha I.
- Pākaikai – Also known as "Queen's bath", this area has a great abundance of loʻi terracing that indicate the cultivation that went on in here in the past.
- Numerous loʻi terraces identified in the ahupuaʻa of Kaʻamola, ʻUalapuʻe, Kaluaʻaha, Waialua, Halawa, among others.
- Ka Ulu Kukui o Lanikaula – Today it is a small grove, but it was once a huge forest of kukui trees (some say 600 acres), which were essential for bringing rains to Manaʻe. The rainclouds were said to travel from Hakaʻano, a northeast ahupuaʻa, move through Ulu Kukui o Lanikaula, and further along all the ahupuaʻa of East Molokaʻi, until they reached Kamalō, and moved out to sea towards Lānaʻi.
- Pristine, intact native forest in upper ʻŌhia and Kahananui (within the Pākuʻi Unit).
- Kahuli snail found in Kumuʻeli and along the north side cliffs.
- Pōhakupili – There are many springs located in this area that begin their flow from mauka and flow all the way down to the various fishponds makai. If the top sources are clogged or dry, the springs down below will also dry-up. This is the epitome of what has been happening with the watershed in Manaʻe. Protecting and restoring the Pōhakupili area warrants attention and care.
- Kapoʻokoʻolau – One kamaʻāina informant said "There's a place, Waikuʻilani, that goes to Kapoʻokoʻolau. There used to be a waterfall going into the gulch that sank down into

the ground, not into the ocean. But along the ocean portion, it formed springs. Each fishpond on east Molokaʻi has 2-3 springs."

- Waiakeaʻakua – identified as "the birthplace of waters," and described as "the most important water source because it feeds every stream on that side of the island." It's critical that area be protected because it acts like a sponge that soaks up the moisture, like Kamakou Bog; its health is vital to the overall watershed health.
- Hālawa – A plethora of cultural sites have been located within this valley, as it was heavily inhabited and used for the cultivation of kalo and other native plants. A full report of all sites within it can be read through Dr. Patrick Kirch's Hālawa Study.[30]
- Wailau – Much like its neighbor valleys (Pelekunu to the west and Hālawa to the east), Wailau was made up of extensive loʻi complexes. These were documented and discussed in Dr. Windy McElroy's dissertation.[31] Wailau is also known for its rocks lying offshore and its relevance to the Moʻolelo of Kana.
- Pelekunu – Much like other surrounding valleys, Pelekunu is known for its plethora of loʻi that were cultivated here. One of its associated islands, Mōkapu, is known for its role in the Moʻolelo of Haʻehaʻekū. A north-south traditional trail is known to have gone from Pelekunu valley through to Kamalō.

Burials:

- Kumimi and Moanui were identified as having aliʻi burials located there.
- Caves in Moanui are also historically and traditionally significant, but landslides have destroyed at least some of these caves.

Other Historic Sites and Moʻolelo:

- The traditional Pākaikai area was identified to be Kamehameha nui's birthplace, and to have a large number of historical sites such as the Queen's bath, an area of rocks with bowls carved into them and used for making ʻawa (see image below).[32] An alternative presented in the East Slope Management Plan would create a corridor through this area, inviting a high concentration of ungulate migration, which could potentially negatively impact important historical sites.[33]

ʻAwa cups in the traditional Pākaikai area. If the alternative consisting of a corridor is implemented, sites such as these would be threatened by heavily concentrated ungulate traffic.

Photo: Ted Kanemitsu

- Moʻolelo of Lanikaula – It was said that the great prophet of Molokaʻi, Lanikaula lived in the 15th century. His bones are believed to rest in Ka Ulu Kukui o Lanikaula (kukui grove of Lanikaula). Several informants mentioned that this site is the second most sacred place in all of Hawaiʻi.
- Moʻolelo of ʻAnini – the magic hala tree and hala mat that carried and saved a baby during heavy floods. This indicates an abundance of freshwater from Honouliwai and presence of important lauhala groves.
- Moʻolelo of Kana – "The rocks of Kana" located outside of Wailau Valley symbolize Kana's body lying in the ocean.
- ʻAhaʻino/Honomuni area – local puʻu one (inland fishpond), whose spring has been impacted by mauka earth moving activities. Coral lanes extending from mākāhā planted in ancient times to attract fish. Also, underwater ahu and reef gardens with the names of women in early Hawaii who tended them. Families related to these women can trace their genealogy and rights of stewardship to these underwater garden plots.
- Hina's Cave – Hina is known as the mother of Molokaʻi island. Also known for famous wind gourd used to restore pono with the people and the land. The location of this important site was not shared for its protection.

Important Trails:

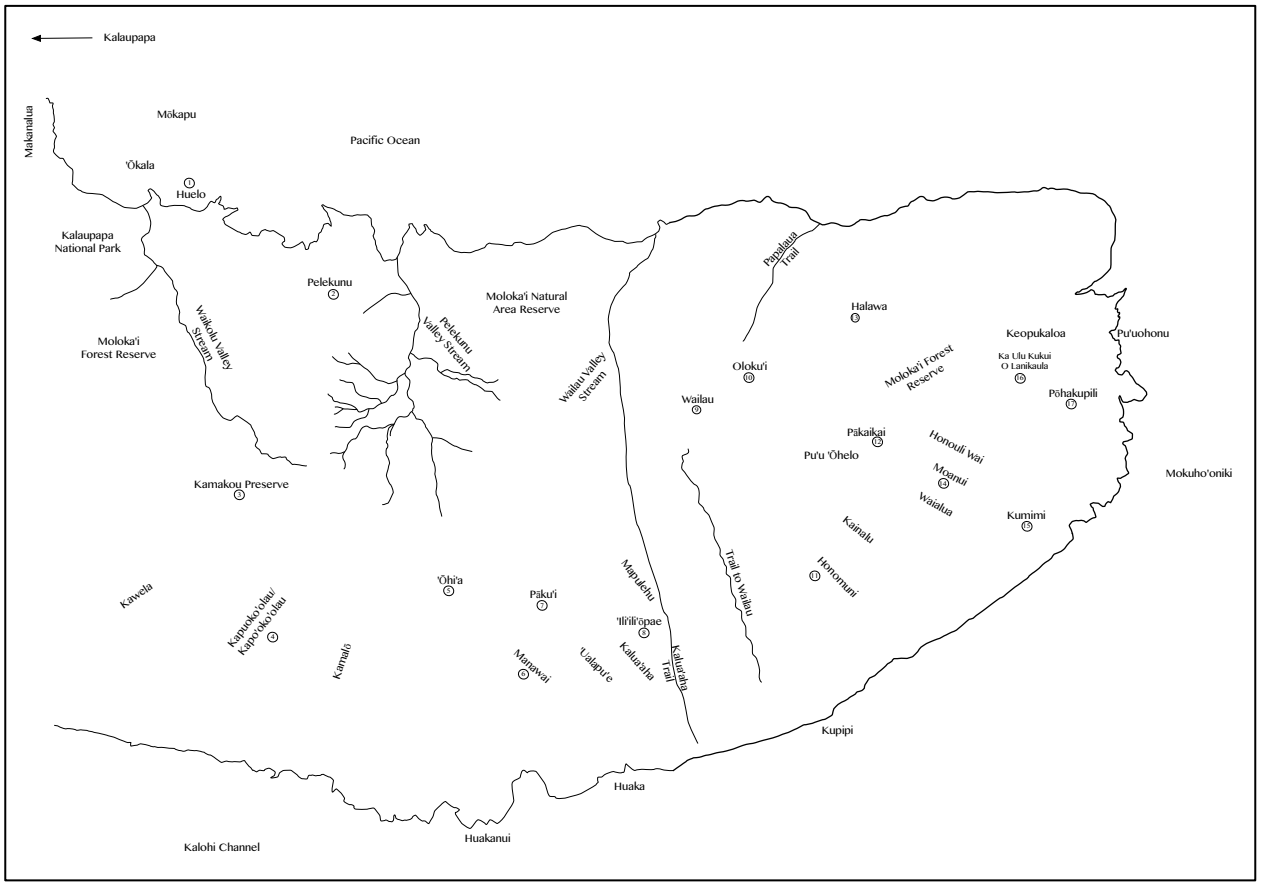
- Wailau Trail – historic trail that leads out from Wailau and cuts towards Mapulehu is still used today. One informant added, "the Wailau Trail was serious. It was categorized as a government road. That is how much people used this road. Uncles were the postal service. There are stories of them delivering mail to Pelekunu. It was the only way to get into town from the backside."
- Pelekunu trail – begins at Makole. There was documentation of this trail in 1960.
- A few kamaʻāina informants mentioned an underground lava tube connecting south shore to north shore, from Kamalō to Pelekunu, although the exact location is unknown. This trail is also mentioned in Aunty Harriet Ne's *Tales of Molokai*.
- Other trails mentioned include the Kaluaʻaha Trail and Papalaua Trail.

Map of Identified Cultural Sites and Trails in Manaʻe

The following map provides an illustration of the multitude of historic sites and trails that the kamaʻāina informants identified throughout Manaʻe. Please note that this map does not encompass all of Manaʻe's historic sites and trails, only those identified by the kamaʻāina informants interviewed by the Native Hawaiian Rights Clinic in February. Thus, this map was prepared by the clinicians, based on the sites identified at that time. Each site is numbered and corresponds to a more detailed description, which is provided in *Appendix B*.

It should be noted that TNC will be conducting a Cultural Impact Assessment (along with an Environmental Assessment) for each unit proposed, beginning with the Pāku'i Unit (the process for which began in 2015). That process should result in a more thorough identification of sites.

Figure 6. Map of cultural sites and trails in Mana‘e identified by kama‘āina informants



Source: UH Native Hawaiian Rights Clinic, Spring 2014.

Recommendations regarding cultural sites and trails, springs, and lo‘i kalo include, but are not limited to the following (a more complete list of recommendations is included in Chapter 5, but these are listed here, as they relate to the map and information collected by the Clinicians):

- Cultural sites should be taken care of and maintained, and whenever possible, such mālama should be carried out by ‘ohana who know the place intimately.
- Trails should be maintained and access should be allowed; ensure they are not blocked by a fence.
- Invasive plants should be removed from streams, especially those that soak up a significant amount of water, such as Java Plum.
- Streams should be maintained, cleared of debris.
- Stream bank should be replanted with native riparian plants.
- Wherever possible, native species should be re-introduced (fish and plants).
- Monitor in-stream flow.
- Lo‘i and ‘auwai should be restored, re-opened, and planted for production. Use them as siltation traps to reduce run-off.

3.3. NEARSHORE FISHERIES: FISHPONDS, REEFS, ESTUARIES, AND OCEAN GATHERING AREAS

Traditionally, an ahupuaʻa ran from the top of the mountain down to the shoreline and out to the edge of the reef. *In Re Kamakana* (1978) says "an ahupuaʻa in ancient Hawaiʻi generally ran from the mountain to the sea. This afforded to the chief of the ahupuaʻa and his people a fishery residence at the warm seaside, together with the products of the highlands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land. Consistent with the concept of the ahupuaʻa as a self-sufficient land unit, both inland and shore fishponds were considered to be part of the ahupuaʻa within its boundaries." Based on this, modern-day law recognizes that fishponds and konohiki fisheries are part of the ahupuaʻa, as are submerged lands.

Numerous kamaʻāina informants discussed the importance of Manaʻe's ocean resources, along with the fishing practices they carry out there, which includes a wide variety of techniques. Several informants mentioned limu (seaweed) gathering as an important part of their traditional and customary practices. They also talked about how the ocean resources have been negatively impacted by the degradation of the watershed. Namely, erosion has caused run-off and siltation of the nearshore waters and the reef. In addition, some of their koʻa (fishing markers) have been impacted by invasive vegetation, such as kiawe, that has hidden their line of sight; thus, impacting their ability to locate certain fishing grounds. Another direct impact of a degraded watershed on the nearshore waters is that certain springs have stopped flowing, which are essential for fishponds to function as they were meant to, since they provide muliwai (brackish water) that feeds the loko iʻa and provides a micro-ecosystem valued by herbivorous fish, such as mullet and milkfish. Thus, there is a very clear correlation between the health of the mauka watershed and health of the nearshore fishing and gathering areas.

In addition, there have been numerous efforts to restore fishponds on Molokaʻi. One such effort currently underway in Manaʻe is Hui o Kuapā – Keawanui Fishpond, formerly known as the Hawaiian Learning Center, under the direction of Walter Ritte, Kalaniui Ritte, and Hano Naehu. They manage Keawanui Fishpond and Kamehameha lands surrounding that pond. They have been restoring and maintaining Keawanui Fishpond since 1999. Through years of hard work, this program has successfully restored this fishpond to being functional again. They are re-opening springs that were covered by mangrove that naturally feed the fishpond and provide muliwai (the brackish water that attracts and feeds fish), rebuilding the stonewalls, as well as restoring the mauka areas to reduce run-off and siltation in the pond. In addition, they use their loko iʻa as an outdoor hands-on classroom to teach others about this resource.

Numerous other informants discussed the importance of restoring and maintaining Manaʻe's fishponds, as a cultural practice and a source of healthy, local food, which was started in the 1980s & 1890s. Right now the law allows for more streamlined permitting for fishponds. An environmental assessment and a Finding of No Significant Impact (FONSI) was issued recently and allows for restoration of fishponds, as well as streamlines the permitting system, which makes it easier for practitioners. This supports the community desire to do additional restoration of loko iʻa.

The following table identifies the twenty-five (25) State-owned and private fishponds in Manaʻe that are considered viable for restoration. The location of these ponds span the length of approximately 11 miles of shoreline beginning from the ahupuaʻa of Kamalō and terminating in the ahupuaʻa of Honouliwai. This information was gathered from the Molokaʻi Fishpond Master CDUA Project provided by the University of Hawaiʻi Department of Urban & Regional Planning Practicum Class in December, 1993.

Table 3.3: East Molokaʻi Fishponds Proposed for Restoration[34]

*Site No.	TMK No.	Name of Pond	Ownership
156	5-6-09	Name Unknown	State
157	5-6-08:20	Kalokoʻiki	Private
160	5-6-05:22	Kainaʻohe	Private
162	5-6-06:9	Mikiawa	State
163	5-6-06:8	Keawanui	Private
165	5-6-04:28	Kaunahikoʻoku	Private
166	5-6-06	Unknown	State
170	5-6-06	Wehelauʻulu	State
184	5-6-03:35	Halemahana	State
185	5-6-01:1	Ualapue	State
188	5-7-11	Kaluaʻaha	State
189	5-7-10:31	Mahilika	State
190	5-7-09:01	Kaʻopeʻahina	Private
192	5-7-07:8	Niʻauhala	Private
193	5-7-08	Unknown	State
202	5-7-07:22	Panahaha	State
206	5-7-06:1	Kupeke	Private
212	5-7-06:22	Kihaloko	Private
213	5-7-06:27	Waihilahila	Private
214	5-7-04:34	Kulaʻalamihi	Private
219	5-7-04:5	Ipukaʻiole	Private
220	5-7-04	Kainalu	State
226B	5-7-01 and 03	Unknown	State
No assigned site number	5-7-03:70	Unknown	State
231	5-8-01:3	ʻOhalahala	State

* Site numbers correspond with Summers' cultural sites inventory.[35]

Below is a quote that captures the privilege that many kamaʻāina feel towards the importance of restoring Manaʻe's fishponds:

Hoʻolaulima ku na kupuna,
Malama no i ka loko iʻa
E hoʻomau i neia waiwai hoʻoilina

Let us work in the manner of our ancestors,
Let us preserve the fishponds
To continue this part of our heritage[36]

In addition to fishponds, Manaʻe has relatively healthy fishing grounds that residents utilize regularly. However, they are not the only ones who know of this resource. There have been numerous incidents over the years, including recently, whereby outsiders have come to fish in Manaʻe and have gotten into conflicts with locals over their right to be there. As a model, a Community-Based Subsistence Fishing Area (CBSFA) designation is something that the Manaʻe communities may want to consider to create its own fisheries management plan.[37] The community has discussed the creation of a CBSFA in the past and it may be time to re-visit the idea, along with looking at other legal designations.

In sum, the people of Manaʻe were "mahiʻai o ka ʻāina me ke kai," farmers of land and sea, which is the motto of Molokaʻi High School. The building of fishponds and other activities of our kupuna, such as creating fishpond gardens and fish houses, and planting coral to coincide with mākāhā, indicate that there is a rich heritage of mālama, of caring for the resources, and of farming these resources, both on land and in the sea. Some of this can happen once more, if these practices are renewed.

Recommendations regarding konohiki fisheries and fishponds include:

- Fishponds should be protected and restored, not only for raising fish, but for their protection of springs and the muliwai created there.
- Remove invasives, such as gorilla ogo limu, and invasive fish like roi.
- All fishing and ocean gathering activities need a healthy watershed, which directly impacts ocean/reef resources.
- Shoreline monitoring should be implemented, as well as offshore monitoring.
- Look into obtaining a Community-Based Subsistence Fishing Area designation.

3.4. HUNTING

Hunting is a large part of Molokaʻi's subsistence lifestyle, as pigs, deer, and goats have become an integral part of Molokaʻi and Manaʻe families' diet. Numerous kamaʻāina informants shared their fear that any fence might negatively impact their ability to continue subsistence hunting. One kamaʻāina informant shared that he has been jumping over fences to hunt and feed his family all is life and he does not want to see any more fences. However, other viewpoints were heard, such as one informant who said that when kamaʻāina are asked what his or her main purpose is, the appropriate response should be "to take care of Hina (the island of Molokaʻi)," which should outweigh the need to protect hunting. He shared that there are some things that should not be compromised and if we take care of the ʻāina, the momona will come back.

Another major concern is the waning respect that some hunters have for the ʻāina and for subsistence practices. Specifically, many Manaʻe hunters who consider themselves "the older generation" agreed that the younger generation of hunters have a different mindset than they do. Some of the members of this older generation said that many hunters now-a-days do it for sport, as shown by them posting their prize bucks on the Internet (Facebook). In addition, it was shared that "some hunters don't participate in mālama anymore, they are getting selective and discarding much of the meat." Some informants observed that some young hunters go in to a place with disrespect – loud, on 4-wheelers, they only take the rack and prime cuts, and then

leave the carcass on the land. Older hunters said they were taught to take every part, not to waste, and not to pollute. They would take as much meat as they could, and then bury the remains. Unfortunately, those cultural values and practices are eroding.

These concerns among the hunters have become personal because it has given them a negative reputation in the community in terms of conservation and aloha ʻāina practices. Recommendations for addressing this erosion of values were shared by a few informants, such as including mālama ʻāina values in hunter education programs, which should be mandatory for all hunters. These recommendations are discussed in more detail in Chapter 5.

Recommendations related to hunting include:

- Figure out what is a sustainable yield and base hunts on this (knowing how many can be harvested without threatening the population).
- Coordinate community hunts (specific techniques elaborated upon below).
- Since all hunters have to go through the Hawaiʻi Hunter Education Course ("hunter course") to purchase a hunting license in order to hunt in the State, the hunter course could be augmented to include conservational approaches and mālama ʻāina values and practices. Young hunters can be taught cultural values and also be expected to do some of this conservation work so they develop a good ethic early on.
- Permission should be asked for safety issues, as well as a matter of courtesy. That is a Hawaiian value, even though the requirement to do so was eliminated as part of the Kuleana Act. As a community we want to adhere to those values, whether it's required or not.
- Form a hunting hui or cooperative, through which hunters could get liability insurance, organize their hunts, and possibly do conservation work as well. This way large landowners would be protected, and it would minimize the worry of lawsuits and liability.
- Several community informants suggested the strategic placement of hunting cabins in mauka areas (just below fenceline) to allow for organized hunts. The placement of hunting cabins at the edge of the fences is suggested so these scheduled community hunts could allow hunting to happen directionally down the hill, instead of always up. The cabins could also be used for conservation efforts, which could be carried out by hunters and/or others.
- For community hunts, implement a technique modeled along surround-net fishing or loko ʻumeiki fishtrap. Some fishermen use a bullpen-style technique with a net in the shape of a heʻe, or octopus. The net opens outward like the legs or tentacles of the octopus. Fishermen then paepae, or slap the water, or do certain movements to herd fish into the net, into the head of the heʻe. The net is then pinched off at the base of the head after the fish are herded in there. It was suggested that we could apply the same concept on the land for community hunts. To do so, stakes would be put in the ground at intervals of 10 feet in the shape of a heʻe. And whenever the community was ready to begin its hunt, a cargo net could be erected along these stakes. Then community hunters could then work together to get deer, goat, or pigs into the head of net. (Note: there is further discussion on this proposed technique in Table 5.3 "Community Suggestion" #8 in Chapter 5.)

3.5. DEGRADING WATERSHED HEALTH IN MANA‘E

As stated previously, the people of Moloka‘i have witnessed a notable decline in the health of their watersheds. A significant part of this declining health is the degradation of the mauka native forests, which has subsequently had a drastic effect on all of the ahupua‘a of Mana‘e, from mauka to makai. Some of the specific conditions observed by kama‘āina informants include the following:

- An overall degradation and/or reduction of resources.
- Animals (wild ungulates and domesticated pigs, cows, etc.) have destroyed much of the native forest. This has allowed non-native invasive species to move in. The native forest has/had various elements – groundcover, sub-canopy, canopy, etc. – the features of succession. All of these elements together form a healthy ecosystem, which holds the soil in place and captures rainwater. However, when this is removed or damaged, the non-native vegetation isn’t as effective at holding the soil together or capturing rainwater.
- When new elements are introduced, such as ironwood or kiawe, they are not good at integrating into the ecosystem. One informant called them “Ilikea plants” – indicating that they are selfish, like some ha‘ole (newcomers) who cannot live in partnership with other plants. A healthy ecosystem consists of biodiversity, whereby all these elements live together. The informants said that the entire system needs to be restored.
- Pigs spread waiawī (strawberry guava) and other invasives; they remove the ground cover, so when the rain comes, the soil washes down.
- Silt in fishponds. The staff at Keawanui Fishpond reported that the pond has plenty of siltation. They believe that much of it was caused by cattle that graze mauka of the pond. In response, they have created berms to prevent the silt from coming down and affecting their operations.
- Several informants talked about native limu dying out in some areas, while coming back in others, such as Ka‘amola.
- Springs are dying out because non-native plants suck up water, which makes lo‘i inoperable. Part of the recommendation is to re-open lo‘i because they transport nutrients that re-enter the stream. Lo‘i are sinks for silt, they let silt settle out, so by the time the water reaches the ocean, the silt is filtered out. Lo‘i also provide ecological niches for opae (shrimp) and ‘o‘opu (fish). Their waste feeds the lo‘i, the ‘auwai (ditch) carries the nutrients down through the system, which then feed the fishpond with nutrient rich water. This feeds the algal-mats. As the water is slowed down, it builds the water table, which gets filled up, and then gushes out at the springs. These springs emerge along the shoreline. When konohiki engineered fishponds, they looked for this “sweet water” from springs, since it attracts fish.
- In ‘Aha‘ino, it was also noted that the waters off the shore were important mating grounds for turtle, known as honu ho‘oipoipo (turtles make love). One informant has witnessed the nesting of turtles along the shoreline where she lives in ‘Aha‘ino. She has been distressed by the clearing of the land above the ‘āina where they live, creating run-off. This run-off has affected the turtles that used to lay their eggs along the shore. What has essentially happened is that the beach sand has now turned to mud. The turtle hatchlings have been unable to emerge through the mud, and they have perished.

- One informant talked about the waters called Waiakeaʻakua, which is like a mauka water bowl that fed/feeds the streams. Several years ago, when access was open, she walked along the ridgeline from Puʻu o Hoku Ranch to ʻAhaʻino. Compared to today, the resources were more lush then, and there were more native plants. Currently, resources are dwindling as well as the land being noticeably drier now. She fears the mauka water bowl is a critical water source that is in danger and needs to be protected.
- Several interviewees mentioned that the number of hīhīwai (endemic grainy snail) in the streams is depleting. Some kamaʻāina informants noted that in Pāpio Stream there is no hīhīwai because there is not enough water. One informant mentioned that within the last 12 years, the spring water died at Honouliwai Stream so the interviewee needed to run a pipe further up the stream to get water. Many community members also rely on the freshwater for loʻi. Waialua and Pāpio were specifically mentioned as having loʻi along their banks. Several Manaʻe communty members also recognized the cultural importance of the streams in the area. Waialua Stream, for example, is in many oli and mele.

In regards to overall watershed health, informants also talked about impacts by large landowners, and the need for more open dialogue and relationship building with certain landowners within Manaʻe. Some specific concerns and comments included the following:

- Several informants mentioned stream diversions by landowners as a concern. Some were seen first-hand, but not all. Some were reported as happening currently, and others in the past. For example, one interviewee mentioned that Moanui Stream does not run anymore, which they believe is due to a diversion above (not verified).
- Numerous informants were concerned about poor ranching practices by some landowners, which are causing erosion and run-off into the ocean.
- It was reported that one large landowner in ʻAhaʻino has done extensive earthwork, which has created landslides and brought silt downstream and into the ocean. It is also believed that he punctured a major water vein, which was critical to feeding a spring that fed a local puʻu one (inland pond). According to informants who live makai of this landowner, the stream waters have since turned foul and stagnant. As mentioned previously, this run-off has also affected the turtles that used to lay their eggs along the shore in ʻAhaʻino. What has happened is that the beach sand has now turned to mud, the turtle hatchlings have been unable to emerge through the mud, and they have perished.
- One informant suspected chemical applications have been applied mauka because native trees have begun to wither, especially the lauhala. This was noted as being detrimental to her cultural practices and livelihood because she utilizes wauke to make traditional Hawaiian cloths and native plants for designs. She also weaves lauhala, so the health of these plants is critical to her.
- It was reported that one large landowner has also made the mauka area into his personal golf course. Hundreds of golf balls have migrated down the stream and into the ocean. This has caused concern in terms of the environment and marine organisms being impacted by the golf balls and other ocean pollution.
- One Native Hawaiian subsistence hunter reported having been arrested on numerous occasions, hand-cuffed and taken to the precinct, but not charged with a crime, for accessing private lands to hunt.

- Several informants were troubled by the fact that Puʻu o Hoku Ranch is currently allowing commercial deer hunts on their land. They are concerned that making deer a commodity will encourage people to hunt more than they need. However, other informants saw deer meat and deer by-products as a possible economic engine for restoration work. Both sides agreed it would be helpful to know the approximate number of deer in Manaʻe, and what a sustainable number might be.
- Numerous informants mentioned the ecological and spiritual importance of Ka Ulu Kukui o Lanikaula, the sacred kukui grove (located on Puʻu o Hoku Ranch lands) and how critical it was that this grove be restored. Traditionally, it was known as a place that gathered the rains of Hina. These rains would begin from Hakaʻano, make their way across several ahupuaʻa to the kukui forest of Lanikaula. These rains traversed the multiple ahupuaʻa of Manaʻe and terminated at the bend of Kamalō, where they extended out to the sea. Several informants expressed a strong desire for Puʻu o Hoku Ranch to work with the community to allow and support restoration of this place. Specifically, several members of Hui Aloha ʻĀina o Manaʻe had begun re-planting the kukui grove in the past, but they had encountered obstacles to completing such work (such as access to irrigation water). As mentioned above, many informants noted that Ka Ulu Kukui o Lanikaula was the second most sacred place in all of Hawaiʻi, and it is imperative that it be taken care of – for ecological and cultural reasons.

From these discussions, it is apparent that much work needs to be done to hoʻoponopono (to make right) relationships that have soured, or that have never been productive. The strong distrust that some informants have, including members of Hui Aloha ʻĀina o Manaʻe, has been caused by what they consider to be bad faith actions by some large landowners in Manaʻe. Those landowners that display a general disregard for the ʻāina, kai, and places that are special and sacred for hoaʻāina, have soured their view for any type of "Watershed Partnership" – that consists of agreements between the state and large landowners. This is a systemic problem that threatens to impede the work that is needed to restore the health of Manaʻe's watersheds mauka to makai.

When kamaʻāina informants were asked about The Nature Conservancy (TNC)'s efforts in the upland native forest to protect the remnant pristine forest, most supported it. Those that were not in complete agreement with the proposed fence, seemed to have more of an issue with what they perceived to be TNC's general approach to conservation. What was expressed was a discomfort based on the belief that TNC seems to rely more on conventional western conservation strategies, and does not give equal regard to traditional native knowledge. The fact that their Native Hawaiian ancient ancestors had created a very abundant ahupuaʻa needs to be acknowledged by modern scientists and conservationists, which should result in more discussions on the diversity of conservation modalities, especially integration of traditional indigenous knowledge and management practices. Some informants also acknowledged that while they would love to see kamaʻāina manage their ahupuaʻa and moku without a fence, they felt the biggest obstacle would be getting the Manaʻe community to work together to implement such a strategy.

From one kamaʻāina's perspective, in traditional times, while the aliʻi (the mōʻī or the chiefs) had management/stewardship control of the land, they also had a duty to treat the people fairly,

and to maintain the abundance of the land. If they breached that, then they were no longer fit to rule. Those that lived there and were under the rule of the aliʻi or konohiki of that area were free to move to a place that was better for them if they felt those in charge were unfit. Thus, the aliʻi knew well that to mistreat the people, meant that the land would also suffer, and not be abundant. ʻĀina momona, therefore, was an indication of pono and lokahi (balance and harmony) between the aliʻi or konohiki and the makaʻāinana or hoaʻāina (native tenants of land) – between stewardship control and those who worked the land. If the land was unproductive, then it indicated that there was no pono between the aliʻi and the makaʻāinana.

Now in this modern day with private ownership, with large landowners in possession of huge tracts of land, there is an expectation by Native Hawaiian families, that these large landowners honor that trust, and manage in such a way that includes family and that values their knowledge and traditional practices. At the heart of this is kuleana, which is a sacred responsibility to the ʻāina and the people. When that is not recognized or rejected by the large landowners, then the land suffers and the people suffer.

For those informants with strong feelings of distrust towards some large landowners in Manaʻe, it is essential that those landowners demonstrate that they have respect for Native Hawaiian rights, such as access, that they respect their traditional knowledge, and they themselves begin to adopt pono practices on the land.

Additional recommendations regarding ahupuaʻa management and watershed restoration include:

- Upper forest should be respected and largely left alone. Manage ungulates in order to protect the critical water resources located there. Native plants should be re-planted, and invasives removed as feasible.
- Restore the lower forest, which has become very degraded in many areas. Native plants should be planted and protected. May need to enclose small, newly planted ones with smaller fences so animals don't eat them.
- Fishing koʻa (markers) should be restored, as well as the line-of-sight to them from the ocean. Doing so would revitalize, or bring back the practices of utilizing fishing koʻa. What happens mauka also affects makai, not just in resources, but also in our ability to perpetuate the practice. Non-native plant species on the land affect fishing practices in the ocean, which exemplifies how the ahupuaʻa must be looked at as a whole.
- Establish native nurseries with mauka and makai species.
- May need to remove some invasives to allow native plants to flourish.
- Support sustainable farming for personal and commercial production.

3.6. SUMMARY OF FEEDBACK ON THE EAST SLOPE MANAGEMENT PLAN (JANUARY 2014 DRAFT)

When interviewing the kamaʻāina informants, one of the main questions asked was, "Do you support the proposed fence? Why or why not?" While a wide variety of answers were provided, the overwhelming majority said "Yes." However, even those who said yes had a variety of manaʻo on exactly how and where that fenceline should be implemented. Based on the East

Slope Management Plan (January 2014 draft) and the community's feedback, there are essentially five (5) discernible ways this conservation effort could be pursued:

- **Proposed Fencing: Pua'ahala to Hālawa**
- **Alternative #1: Fencing with Pākaikai Corridor**
- **Alternative #2: No Fencing**
- **Alternative #3: Mauka-Makai Fencelines**
- **Alternative #4: Lowered Fenceline**

In addition, there was some feedback related to the fence that is summarized in the sub-section entitled: **Additional Community Mana'o Regarding Fencing.**

*It should be noted that since the time when the majority of the interviews for this report were done (early 2014), TNC has stated (in October 2014) that the Pāku'i Unit is their priority and they are focusing on that for now. The Pāku'i Unit consists of the native forests atop the ahupua'a of Pua'ahala to Kalua'aha.[38] However, the mana'o is presented here in the way it was shared with the authors of this report.

3.6.1. Proposed Fencing: Pua'ahala to Hālawa

As stated previously, the majority of the informants interviewed support the fencing as proposed in the East Slope Management Plan. Among those Mana'e residents who are in support of the fencing project as proposed, there is general agreement that its goals – to protect and revitalize our critical mauka watersheds – are important and pono. However, there is also a strong sentiment that there must be a balance between the conservation efforts and the protected rights to carry out traditional and customary practices. There is agreement that access to enclosed managed areas must be provided to both hunters and gatherers. As part of the proposal, "step-overs" are included in the East Slope Plan that would ensure such access. There is also recognition that blocking access of the ungulates in managed areas via fencing means that the animals will inevitably migrate to unfenced areas (i.e., change their migration patterns), thus further degrading those areas. While those who support the fencing project as proposed generally recognize these two issues as challenges, the belief is that they can be overcome with the participation and involvement of the community, especially hunters.

Some experienced community hunters believe that the fence would actually make hunting easier, as it is likely that the ungulates will forage along the fenceline (as seen in the Kamalō fencing project), and will have more predictable patterns of movement. There are also some who believe that erecting a fence is akin to the traditional kapu system and argue that preservation of traditional and customary rights necessarily means that sacrifices are needed to be made today to ensure that future generations of Native Hawaiians have a healthy 'āina where they can practice traditional and customary rights. It was also mentioned that it is incorrect to say that fencing is contrary to Native Hawaiian culture. The loko kuapā (fishpond made by building a wall on a reef) was given as an example.

Overall, the proposed fencing from Pua'ahala to Hālawa has substantial support by the kama'āina informants, as long as access for traditional and customary practices is ensured with the implementation of step-overs, and additional management is included for the areas

makai of the fenceline. They would also like to see mitigation efforts for unfenced areas and/or areas impacted by changed migration patterns. However, not every ahupua'a supports the fence, as detailed below (specific ahupua'a identified in Chapter 5). Thus, it is recommended that the fence be implemented in those areas that support it.

3.6.2. Alternative #1: Fencing with Pākaikai Corridor

The East Slope Management Plan (January 2014 draft) as proposed includes four priority management units extending from the west in the Pāku'i region to the northeast in the Pāpalaua region. In between, the Mapulehu and Keopuka Loa Units will also be covered by the East Slope Plan. However, due to the lack of native vegetation and the benefit of continued use as a hunting area, the East Slope Plan alternatively proposes to exclude the Pākaikai sub-unit of Papalaua. This alternative proposal would create a corridor between the adjoining Papalaua and Keopuka Loa Units and the Mapulehu Unit.[39] This alternative approach has created some contentions among community members who view this strategy as counter-intuitive to EMoWP's commitment to protect the mauka forested watersheds.

Several of our informants expressed that their main concern with this alternative is the corridor that it will create through Waialua and Honoulimalo'o. One of the informants shared their belief that having this corridor would create heavy ungulate traffic, which would deteriorate a number of important streams that supply freshwater to families that rely on them for agriculture and domestic needs. Other informants shared their concerns that increased ungulate activity in the unfenced area would do more harm than good, especially in that it would impact the intact native ecosystems there, such as the native plant species, birds, insects, and fish. Another area of concern is how this alternative would impact some sensitive cultural sites that may be trampled by ungulates, such as the awa cups and ali'i baths, as well as the Pākaikai agricultural complex of Kamehamehamehanui'ailuau.

The East Slope Management Plan identified key areas where ungulate activities are most active and where hunting is primarily concentrated. These areas include the mauka watersheds east of Mapulehu in the Pākaikai and Hāka'a'ano areas.[40] Axis deer dominate the Pākaikai area, while Axis deer and pigs are also found in the Hāka'a'ano area.[41] Because much of the ungulate activity is concentrated in the area along the corridor that is excluded in the East Slope Plan's alternative fencing control program, some hunters are reluctant to support the proposed Watershed Plan. One cultural informant stated his belief that if all of the areas between Pāku'i and Pāpalaua are left un-fenced, it would be better to not have any fence at all.

Another major concern for hunters regarding the deterioration of the Waialua and Honoulimalo'o region is the waning respect that other hunters have for their 'āina, as discussed previously. The generational divide between the new and old hunters is thus worrisome for traditional hunters who view the East Slope Plan's Pākaikai Corridor Alternative as potentially setting off an unintended ecological disaster in the isolated corridor in Moloka'i's far east side. The potential for the discarded meat to wash down into the streams is a major concern, and so is the run-off that would be created when hunters access the trails by all terrain-vehicles in the upper-reaches of the corridor.

Overall, "Alternative #1: Fencing with Pākaikai Corridor" has very little community support, due to the potential negative impacts to the land within the corridor, and therefore, should not be pursued.

3.6.3. Alternative #2: No Fence

While there is recognition that something needs to be done to help revitalize the native forest and protect the watersheds in the mauka areas, some informants – who are grounded in practicing the traditional and customary way of conservation or mālama – find the proposed fencing plan to be contrary to Native Hawaiian values. They believe the focus should instead be placed on reinstituting traditional values in the community through education.

These informants say that symbolically, the fence itself represents a continued movement away from traditional values of exercising one's responsibility or kuleana to care for or mālama the ʻāina. Moreover, the fence historically represents the idea that people should "keep out" which has prevented some kamaʻāina from exercising their traditional and customary rights in certain areas. Even with the proposed step-overs, there is lingering concern that erecting a fence will have an implication on the rights of hunting and gathering. Two additional arguments against the use of a fence include mistrust of large landowners and having to work with them (as discussed previously), and having a man-made metal structure in nature.

Informants also expressed their belief that the fenceline as proposed is contrary to the traditional ahupuaʻa management practices of their kūpuna, which encompassed mauka to makai. Some said that one area should not be identified as being more important than another (i.e., mauka vs. makai), and encouraged instead, that there be a holistic approach to take care of all the resources in all the areas of the Manaʻe moku.

Overall, there are a few ahupuaʻa where the over-riding sentiment of those residents is "no fence" (specific ahupuaʻa identified in Chapter 5). Thus, it is recommended that the people of those areas begin and continue a dialogue with the implementers of the fence (TNC) about their desire to manage their place themselves. It is possible, that as the fence west of them is implemented, the impacts may be seen as positive and worth implementing.

3.6.4. Alternative #3: Mauka-Makai Fencelines

This alternative is related to the previous one (No Fence). The reason for this connection is that if certain areas choose not to implement a fence in their ahupuaʻa (or ahupuaʻa cluster), then it may cause greater harm to that area if a corridor is created. Thus, a mauka-makai fenceline was suggested to prevent migration of ungulates further east. However, some of those residents who are opposed to the fence also do not want a metal man-made structure in their natural areas. Such a mauka-makai fence may actually increase the amount of metal structures surrounding their land. Furthermore, initial feedback from TNC is that mauka-makai fences may be too expensive, and not economically feasible for them to implement. Thus, further discussion is needed if there is interest in pursuing this alternative.

Overall, mauka-makai fences may be considered as a possible alternative in certain areas where the proposed fence is opposed. However, it should only be pursued through open dialogue between kama‘āina, large landowners, TNC, all other key partners involved, and with careful consideration to costs, potential impacts, and alternative management methods.

3.6.5. Alternative #4: Lowered Fenceline

One informant said, “Why are we relegating ourselves to the remnant native forest? Why don’t we bring the fenceline down to allow the native forest to regrow into the areas where it used to be?” Several informants agreed with this sentiment, and some recommended moving the fenceline one or two miles below the receding forest line to allow complete rejuvenation of the forest. One informant suggested lowering the fenceline below the Kamakou flats.

However, some large landowners are only comfortable with including the lands that are within the forest reserve boundary line because these lands fall within the Conservation zone, rather than their Agricultural zoned land. Another potential challenge associated with this proposal is that additional landowners would have to become members of the EMoWP.

Overall, this alternative should be considered in areas where the kama‘āina and large landowners are interested in doing so. It has the potential to have an even greater impact to the health of the overall ahupua‘a.

3.6.6. Additional Community Mana‘o Regarding Fencing

While informants generally support the concept of fencing, some interviews of key informants elicited strategies that could augment the proposed plan. The recommendations heard most commonly are described below and summarized in the Recommendations section (Chapter 5) of this report.

Smaller and More Manageable Sub-Units

The draft East Slope Management Plan currently depicts Management Units that are very large, and that would most likely be difficult to manage. A recommendation shared by some key informants was to build smaller and more manageable sub-units. A strong sentiment from an experienced fencer from the Mana‘e community was to make sure to build what you can manage and manage what you can build; building bigger and not being able to manage it in the long run reduces the effectiveness of protecting the watershed within the fenceline. It should be noted that while the draft East Slope Plan has maps that depict large units, which is what this input was based on, the Plan also includes language that supports this recommendation: “Given the large size of the unit, it will be necessary to break it apart into smaller ‘subunits’ that can be managed more effectively.”[42]

Active Engagement and Inclusion of the Community and Hunters

Several informants expressed that they would support the fence if fencing is considered to be only one part of a larger conservation effort. This larger effort should solicit active community participation, whereby participants are compensated. A recommendation was also made that management of the fenced areas should include compensated positions for community members

to participate in erecting the fence, eradication of invasive plant species, and control of invasive animal species. These recommendations are also supported by the East Slope Plan.

Traditional Fishing Methods Adapted to Land in order to Manage Ungulate Populations

To help manage ungulate populations, and where needed, to prevent eastern migration of ungulates, it was suggested to build a loko umeʻiki, a traditional style of fish traps, on land to help guide the migration of ungulates into a bullpen contraption, in the shape of a heʻe (octopus). For the bullpen, you would set up stakes in a specific formation to attract the controlled flow of ungulates from the loko ʻumeʻiki. When ready, you would hang up cargo nets along the pins that are staked in the ground, forming the bullpen, to round up and catch ungulates. It was stated that this recommendation would probably work best for goats, but could be tried with deer and pigs.

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[21] DAVIANNA PŌMAIKAʻI MCGREGOR, NĀ KUAʻĀINA: LIVING HAWAIIAN CULTURE 6-8 (2007) [hereinafter MCGREGOR, NĀ KUAʻĀINA].
[22] *Id.* at 193.
[23] *Id.* at 208.
[24] MANAʻE GIS MAPPING PROJECT, *supra* note 2.
[25] Jon Matsuoka, Davianna P. McGregor & Luciano Minerbi, *Governor's Molokaʻi Subsistence Task Force Final Report* (1994).
[26] *See supra*, Section 2.5.2.
[27] Leon Noʻeau Peralto, *Mauna a Wākea: Hānau ka mauna, the Piko of Our Ea*, A NATION RISING: HAWAIIAN MOVEMENTS FOR LIFE, LAND, AND SOVEREIGNTY 233 (Noelani Goodyear-Kaʻōpua et al. eds., 2014).
[28] Samuel Elbert, *Connotative Values of Hawaiian Place Names*, DIRECTIONS IN PACIFIC TRADITIONAL LITERATURE: ESSAYS IN HONOR OF KATHARINE LUOMALA 121 (Adrienne L. Kepler & Harry Nimmo eds., 1976).
[29] DAVIANNA MCGREGOR, THE NATURE CONSERVANCY, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, MAKAKUPAʻIA AND KAWELA, ISLAND OF MOLOKAʻI 24 (2006) [hereinafter MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE].
[30] *Prehistory and Ecology in a Windward Hawaiian Valley: Hālawa Valley, Molokai*, 24 PACIFIC ANTHROPOLOGICAL RECORDS 167 (Patrick Kirch & Marion Kelly eds., 1975).
[31] Windy McElroy, *The Development of Irrigated Agriculture in Wailau Valley, Molokaʻi Island, Hawaiʻi* (Aug. 2007) (unpublished Ph.D. dissertation, University of Hawaii at Mānoa).
[32] It should be noted that today Pākaikai is commonly used to refer to a hunting area that abuts the back eastern bowl of Wailau Valley, which differs in location from the traditional Pākaikai.
[33] TNC has stated that it will fence the native rainforest in Waialua if the EMoWP gets landowner support.
[34] UNIV. OF HAW. DEPʻT OF URBAN & REGʻL PLAN., FISHPOND MASTER CDUA PROJECT 22-23, 25-27 (1993).
[35] *Id.* (citing CATHERINE C. SUMMERS, MOLOKAI: A SITE SURVEY (1971)).
[36] Graydon "Buddy" Keala et al., Loko Iʻa: A Manual on Hawaiian Fishpond Restoration and Management 6 (2007) (citation omitted), www.ctahr.hawaii.edu/oc/freepubs/pdf/Loko%20I'a%20Full%20Publication.pdf.
[37] A state law passed in 1992 (HRS § 188-22.6) allows marine areas in Hawaiʻi to be designated as a Community-based Subsistence Fishing Area (CBSFA), intended to protect fishing practices "customarily and traditionally exercised for the purposes of native Hawaiian subsistence, culture, and religion." Haw. Rev. Stat. § 188-22.6 (1995).
[38] *Summary Update of the East Slope Watershed Project*, NATURE'S NEWSFLASH 2014 (The Nature Conservancy Molokaʻi Program, Kualapuʻu, Haw.), Oct. 2014.
[39] Dunbar-Co, *supra* note 9 at 20.
[40] *Id.* at 14.
[41] *Id.*
[42] *Id.* at 19.

4. Legal Framework and Analysis

The following analysis provides the basic legal foundation for Native Hawaiian rights law. It describes relevant constitutional and statutory provisions, as well as the body of common law developed from Hawai‘i Supreme court decisions on Native Hawaiian rights. This legal section is divided into specific areas of the law that correspond to mana‘o shared by Mana‘e kama‘āina informants. This mana‘o is analyzed within the context of the proposed expansion of the East Moloka‘i Watershed Partnership (EMoWP). It covers traditional subsistence activities in Mana‘e, religious and ceremonial protocols, and efforts to mālama ‘āina. This section describes kama‘āina perspectives on the impact, both beneficial and adverse, of the proposed fenceline expansion on their traditional practices. This section touches upon the overall watershed management recommendations within the ethic of mālama ‘āina and a holistic understanding of restoring ahupua‘a health from mauka to makai. A more detailed account of management recommendations is covered in Chapter 5.

This section describes the history behind the formation of ‘aha councils to govern the people and manage the ‘āina within moku (regions or districts on each island) and smaller land divisions called ahupua‘a. It explains the modern application of this ancient system into the legislatively created Statewide ‘Aha Moku Advisory Committee (AMAC) and the initiative taken at the grassroots level to re-activate local ‘aha councils on Molokai. This section focuses specifically on the affirmative role the Ko‘olau/Mana‘e moku has taken in providing a local and indigenous framework for free, prior, and informed consent as the community considers the implications, both positive and negative, of the proposed East Slope Watershed Start-Up Management Plan and determines its role in caring for ahupua‘a resources from mauka to makai.

Other sub-sections will cover the status of hunting as a customary practice, protections afforded to trails and historic sites, traditional fisheries and fishponds, water rights and the public trust, and certain environmental legal protections available to the Mana‘e community.

4.1. ‘AHA MOKU AND TRADITIONAL RESOURCE MANAGEMENT

There is no man familiar with fishing least he fishes and becomes an expert.
There is no man familiar with the soil least he plants and becomes an expert.
There is no man familiar with hō‘ola least he be trained as a kahuna and becomes expert at it.
That mana`o was the standard that kupuna went by in determining who would sit on the councils …
Through the `aha councils with multiple expertise woven into a strong cord, the people established lōkahi.
Lōkahi is the balance between the land, the people that lived upon the land, and the akua.
The result of lōkahi was pono, the spiritual balance in all things.
The ‘aha represents the binding and the pono that is created for the land that will sustain life.
This prepares the way spiritually for the land physically …
The manifestation of pono is the land and people flourishing abundantly with food and many descendants.
This comes from understanding the concept of the ‘aha.

- Kumu Hula John Ka‘imikaua[43]

4.1.1. Statewide ʻAha Moku Advisory Committee

In recent years, the State of Hawaiʻi has acknowledged the need to integrate Hawaiian traditional ecological knowledge into natural resource management. In 2006 and 2007, a series of conferences titled *Hoʻohanohano I Na Kupuna Puwalu* convened to gather input from Maoli cultural practitioners on natural resource management as part of an initiative sponsored by the Office of Hawaiian Affairs (OHA), the Association of Hawaiian Civic Clubs, the Hawaiʻi Tourism Authority (HTA), Hawaiʻi Coastal Zone Management Program, Kamehameha Schools, and the Western Pacific Regional Fishery Management Council. Legislators and governmental agencies were also invited.

These gatherings resulted in the passage of Act 212 by the State legislature and approval by former Governor Lingle on June 27, 2007. Act 212 "initiat[ed] a process to create a system of best practices that is based upon the indigenous resource management practices of moku (regional boundaries), which acknowledges the natural contours of land, the specific resources located within those areas, and the methodology necessary to sustain resources and the community."[44] Eight representatives from each island, nominated by the Association of Hawaiian Civic Clubs and appointed by Governor Lingle were chosen as part of the Statewide ʻAha Moku Advisory Committee to begin working on this framework together and on their respective islands. As early as 2008, Molokaʻi worked proactively to establish ʻaha leadership at the moku level. In 2012, the State passed Act 288 to establish the ʻAha Moku Advisory Committee (AMAC) within the State Department of Land and Natural Resources (DLNR) for the purpose of integrating traditional Hawaiian resource conservation practices on all islands.

Specifically, these Acts charge AMAC with:

1) Integrating indigenous resource management practices with western management practices in each moku;
2) Identifying a comprehensive set of indigenous practices for natural resource management;
3) Fostering the understanding and practical use of native Hawaiian resource knowledge, methodology, and expertise;
4) Sustaining the State's marine, land, cultural, agricultural, and natural resources;
5) Providing community education and fostering cultural awareness on the benefits of the ʻAha Moku system;
6) Fostering protection and conservation of the State's natural resources; and
7) Developing an administrative structure that oversees the ʻAha Moku system.[45]

At the urging of the late Kumu Hula John Kaʻimikaua and those who perpetuate his legacy and teachings, Molokaʻi has taken leadership in organizing its ʻaha councils. Of the islands, Molokaʻi has had the most experience in utilizing its ʻaha councils for local decision-making, working with private entities, and interfacing with State and County agencies. Molokaʻi for the most part has also stayed true to the original intent for which the ʻaha councils were formed i ka wā kahiko (in ancient times).

4.1.2. The ʻAha Councils Historically

According to Kumu John Kaʻimikaua the purpose of the ʻaha councils was to utilize the expertise of those with ʻike (knowledge) to mālama ʻāina, to care for the natural resources, and to produce food in abundance not just for the people, but for successive generations. ʻAha council leadership was determined by the people who collectively understood who the experts were in their community. These were experts in fisheries management, hydrology and water distribution, astronomy and navigation, architecture, farming, healing arts, etc. As Kumu John explained, the common Molokai saying was, "There is no man familiar with fishing least he fishes and becomes an expert. There is no man familiar with the soil least he plants and becomes an expert. There is no man familiar with hōʻola least he be trained as a kahuna and becomes expert at it."[46] Thus, leaders who governed the people and managed the resources were those who were actual practitioners; those who had gained a comprehensive and masterful understanding of the biological, physical, and spiritual aspects of the ʻāina. The kūpuna metaphorically ascribed these councils and the weaving of various ʻike, or knowledge streams, as an ʻaha. The individual aho or threads made from the bark of the olonā shrub were woven together to make strong cordage, called ʻaha. Thus the early Hawaiians referred to their councils as ʻaha to represent the strong leadership created when acknowledged ʻike holders came together to weave their varied expertise for collective decision-making that benefitted the people, land, and natural resources. The term kiole described the abundant human population, likened to the ʻiole or large schools of pua (fish fingerlings) that shrouded the coastline en masse. Thus, Molokaʻi's councils were called ʻAha Kiole, the people's councils.[47]

The 8 Resource Realms and the Decision-Making Matrix under the ʻAha Councils. Historically, there were certain resource realms that the ʻaha councils of Molokaʻi considered before making their decisions.[48] The eight resource realms included the following:

1) ***Moana-Nui-Ākea*** – the farthest out to sea or along the ocean's horizon one could perceive from atop the highest vantage point in one's area.
2) ***Kahakai Pepeiao*** – where the high tide is to where the lepo (soil) starts. This is typically the splash zone where crab, limu (seaweed), and ʻopihi (limpet) may be located; sea cliffs; or a gentle shoreline dotted with a coastal strand of vegetation; sands where turtles and seabirds nest; or extensive sand dune environs.
3) ***Ma Uka*** – from the point where the lepo (soil) starts to the top of the mountain.
4) ***Nā Muliwai*** – all the sources of fresh water, ground/artesian water, rivers, streams, springs, including springs along the coastline that mix with seawater.
5) ***Ka Lewalani*** – everything above the land, the air, the sky, the clouds, the birds, the rainbows.
6) ***Kanaka Hōnua*** – the natural resources important to sustain people. However, management is based on providing for the benefit of the resources themselves rather than from the standpoint of how they serve people.
7) ***Papahelōlona*** – knowledge and intellect that is a valuable resource to be respected, maintained, and managed properly. This is the knowledge of the kahuna, the astronomers, the healers, and other carriers of ʻike.
8) ***Ke ʻIhiʻihi*** – elements that maintain the sanctity or sacredness of certain places.[49]

The ʻaha councils held themselves accountable to make wise decisions on behalf of these eight resource realms. They recognized that more than just good intentions were necessary for making sound decisions. The ʻaha as a collective considered every idea along the eight resource realms. Potential solutions were weighed according to how beneficial or detrimental they were to each realm. If a proposed solution was determined to be good overall to each of the resource realms, "honor[ed] the ancestral past, address[ed] the needs of the present, and set up future generations to have more abundance" then that measure was adopted for implementation.[50] Kumu John Kaʻimikaua expressed that this wise management resulted in lōkahi, "the balance between the land, the people that lived upon the land and the akua (gods)." In turn, lōkahi manifested "pono, the spiritual balance in all things."[51]

Each island was divided into moku and ʻaha councils customized their leadership and management in ways that were most appropriate for their place. The common denominator among these councils was the approach of choosing expert practitioners as ʻaha leaders. ʻAha moku leaders throughout Ka Pae ʻĀina gathered often to learn from each other. These religious and educational exchanges allowed them to adopt innovations, make improvements, and progress forward together. The people governed themselves in this manner for seven hundred years from the second century, A.D. until the Tahitian migration and introduction of the hierarchical aliʻi (chiefly) system in the end of the ninth century.[52] Kumu John Kaʻimikaua shared the results of ʻaha governance during this rich period of development:

> After the passing of the first seven generations under the ʻaha councils, peace was established. By the sixteenth generation, there was no more manufacture of weapons and no knowledge of war amongst the people. The leadership of the ʻaha councils was so proficient in providing for the people's needs. Everyone had enough food, materials for housing, and clothing. There were no rich, no poor. Because of the ʻaha councils, the people were able to progress and expand their farming and fishing abilities and excel spiritually. About three-hundred years after the formation of the ʻaha moku councils, the lands became abundant and the population of the islands increased.[53]

The flourishing of the land and people prompted the ʻaha moku councils to join and discuss the manner in which they should organize themselves further to support the growing population and resource abundance. The ʻaha leadership elected to divide moku into smaller, more manageable units of land called ahupuaʻa.[54] ʻAha ahupuaʻa were comprised of resident experts within the ahupuaʻa. From here the various ahupuaʻa managed themselves under the guidance of their own experts. Ahupuaʻa provided the needed structure and organization from which the land could be managed towards abundance and by which the people could prosper further.[55] Governance remained with the ahupuaʻa unless an issue affected the entire moku. These councils would convene according to whether decision-making was necessary at the island-wide (mokupuni), regional (moku), or more specifically at the ahupuaʻa level. Representative leadership was present at all these levels. Together, they comprised the people's councils or ʻAha Kiole o Molokaʻi and made decisions together for the betterment of the island and its respective divisions.[56]

The ʻaha councils remained relevant on Molokaʻi up until the rule of Kamehameha I,[57] Hawaiʻi's first king who united all the islands under one rule. Through the ʻAha Kiole, Molokaʻi

was traditionally divided into four moku, or districts: Kaluakoʻi (west), Palaʻau (central), Kawela (kona),[58] and Koʻolau (north).[59] This form of governance earned Molokaʻi's renown as ʻāina momona, the "fat land" with its numerous fishponds and bountiful harvests.

4.1.3. ʻĀina Governance under the Aliʻi

Political conquests in latter centuries under aliʻi rule typically consolidated power in a Mōʻī (supreme chief) who acquired authority over an entire mokupuni. Through successful military campaigns they may have also attained power over several islands.[60] When a new mōʻī came into power, the first order of business entailed a complicated and politically delicate process of land distribution amongst the ʻaha aliʻi, a council of chiefs loyal to the mōʻī. This process of land distribution was called a kalaiʻāina.[61] If there were existing moku, ahupuaʻa, ili, and their palena (boundaries) were already well-known and affixed in the minds of the makaʻāinana (common people of the land),[62] then it was advantageous to all to maintain these traditional understandings so as to avoid confusion and conflict, as well as maintain ʻāina momona.[63] Several Mōʻī are renown through oli (chants), mele (song), and moʻolelo (storied accounts) for their wise management and dividing of the lands.[64] They did so in a manner that maximized productivity, kept makaʻāinana happy, and minimized strife among the chiefs who were granted authority over specific moku.[65]

The aliʻi appointed to govern various moku were called aliʻi ʻai moku.[66] They, in turn, selected aliʻi ʻai ahupuaʻa to govern ahupuaʻa.[67] Konohiki, those who possessed special expertise in natural resource management, were designated by the aliʻi ʻai ahupuaʻa to oversee agricultural activities; to fairly allocate water among the makaʻāinana (common people of the land); to monitor fishery health; and enforce kapu. The kapu were strictures and regulations governing human behavior in a manner that preserved resource abundance and allowed for continued renewal.[68]

4.1.4. The Central Role of the ʻOhana in Contributing to Thriving Ahupuaʻa

Despite political wranglings and power dynamics of the aliʻi who sought rule over their island and various moku, the makaʻāinana remained the single constant.[69] The makaʻāinana comprised many ʻohana, the extended families who cultivated the land.[70] If treated fairly by the aliʻi, they remained for many generations in the same area and maintained ʻohana relationships that spread throughout ahupuaʻa and moku.[71] Members of extended ʻohana lived inland (ʻohana ko kula uka) as well as along the shore (ʻohana ko kula kai).[72] Typically, the extended ʻohana lived along ʻili which were ahupuaʻa segments, narrow land strips running mauka to makai.[73] For families, ʻili served a functional purpose to best meet their needs. Families maintained rights to use, cultivate, and mālama their ʻili.[74] Ideally, ʻili comprised a mauka (mountain, inland) piece noted as the ʻumeke ʻai ("that which filled the poi bowl") and a makai (shoreline, nearshore) section called the ipukai ("meat bowl") where a rich source of fish was provided.[75] At times ʻili were not contiguous, but comprised of geographically disconnected segments; these were called ʻili lele ("jumping" or "leaping" ʻili).[76] Again, this was likely to serve a functional role so that the extended ʻohana had access to resources that provided for their subsistence and daily needs. As cartographer and Māhele expert Dr. Kamanamaikalani Beamer writes, "Often ʻili lele included a mountain section, a wetland section, and a fishery."[77] ʻOhana regularly exchanged valued items and foods with each other and came together to prepare lūʻau (feast celebrations),

conduct hukilau (surround fishing), build hale (houses), engage in communal work activities, and prepare makahiki[78] tributes collected by the aliʻi.[79]

The ʻohana also chose haku who functioned as the head of the family; this person was usually a respected kupuna (elder).[80] The haku led the ʻohana councils; equitably distributed fish among the family; welcomed guests and aliʻi; supervised communal work; and led religious and ceremonial activities.[81] Given that Molokaʻi's ʻaha councils remained relevant up until Kamehameha's conquest, it is likely that these haku were given a place of importance at the ahupuaʻa councils; for according to Kumu John Kaʻimikaua, the ʻaha ahupuaʻa were comprised of ʻohana representatives known by their family for their ʻike as expert practitioners.[82] Managing the affairs at the ahupuaʻa level greatly eased the burden on moku councils to the point where they rarely met, unless a matter affected all ahupuaʻa within a moku.[83] According to Kumu John, this bottom-up process was quite effective, "unlike our modern day governing where the heads of the state makes the final decision for the masses beneath."[84] The local leadership of the ʻohana councils and the konohiki (resource managers and agents) with their intimate knowledge of place and palena at the ahupuaʻa level provided efficiencies, maximized productivity, and served to complement and balance the top-down, centralized structure for which the mōʻī and the council of chiefs served to govern the larger issues at the mokupuni (island) and moku (district) level.[85]

Additionally, a trust relationship existed between the aliʻi nui and makaʻāinana which provided a foundation for reciprocity, peace, and prosperity.[86] This trust relationship was founded on genealogical and cosmological beliefs relating to the mating of earth and sky and the birth of both Hāloa-naka, elder sibling whose kino (body) became the taro plant and staple food of the Hawaiian people, and younger sibling Hāloa, the first aliʻi and progenitor of Kānaka Maoli.[87] As the living manifestation of the akua (gods), the aliʻi "mediat[ed] between the divine and human" and held a sacred duty to protect the people:

> "Should an *Aliʻi Nui* neglect proper ritual and pious behavior, surely a famine or calamity would ensue. Should a famine arise, the *Aliʻi Nui* was held at fault and deposed. Alternately, should an *Aliʻi Nui* be stingy and cruel to the commoners, the cultivators of the *ʻĀina*, he or she would cease to be *pono*, lose favor with the *Akua* and be struck down, usually by the people. Thus, the *Aliʻi Nui* had to juggle their responsibilities to keep the cosmos in order. To protect themselves, and to maintain *pono* for their people ..."[88]

These understandings of reciprocal kuleana and mālama engendered a system of "checks and balances" between aliʻi and makaʻāinana in service of each other and in their collective reverence for nā akua and ʻāina. Further, if the aliʻi mistreated makaʻāinana or dishonored the trust relationship between them, makaʻāinana were free to leave and find a more favorable place to live. This freedom of movement of the makaʻāinana provided an incentive for the aliʻi to treat them well, as the ʻāina was made momona (productive, abundant) by the people's hands.[89]

4.1.5. The Nature of Ahupuaʻa, Some General Characteristics, and Kamaʻāina Knowledge of Ahupuaʻa Health in Manaʻe

The Hawaiʻi Association of Watershed Partnerships' website describe ahupuaʻa as the "Hawaiian equivalent of a watershed … a land division with the streams and valleys serving as

boundaries … includ[ing] the land from the mountains to the coast."[90] Ahupuaʻa have also been described as "wedge"[91] or "pie" shaped divisions of land "radiat[ing] from the interior uplands, claim[ing] a deep valley, and extend[ing] seaward past the shoreline."[92] According to Dr. Beamer, generalized characterizations of ahupuaʻa as "watersheds" constituting "pie" or "wedge-shaped" areas of land running from mountain to sea negate the complexity with which the early Hawaiians divided the land[93] and serve to "deculturize[ ] ahupuaʻa and remove[ ] the Hawaiian-ness from the equation."[94]

Dr. Beamer provides empirical evidence that only 5.4% of Hawaiʻi's nearly 2,000 ahupuaʻa qualify as true watersheds.[95] Few ahupuaʻa boundaries actually follow watershed boundaries; rather the boundaries may run along ridgelines or transect watersheds.[96] On Molokai alone, 8 of a total of 85 ahupuaʻa (9.4%) meet the definition of a watershed.[97] In reality, ahupuaʻa divisions are quite varied throughout the Hawaiian archipelago. Some ahupuaʻa are landlocked and did not have the capability alone to provide for all the daily needs of the people.[98] Other ahupuaʻa span mid-mountain to sea rather than from mountain peak; include coastal resources only; span both leeward and windward coasts and mountain ranges; or are split into lele. Specifically as to Lanaʻi and some areas on Molokaʻi such as Pālāʻau, ahupuaʻa span the length from the fishery on one side of the island, up the mountain, and down to the other side of the island to the opposite shore.[99] On Molokaʻi there are also ahupuaʻa split into lele.[100]

For Manaʻe families this may be significant in that several expressed in their interviews a practice of traveling to the remote, northeast side of the island to gather hihiwai and ʻoʻopu as well as engage in fishing and hunting activities. The northeast-southeast connection has become reinforced especially for hunters who attest to certain migrational patterns of deer, pig, and goat that they hunt for subsistence. Traditional trails both on land (e.g., Wailau-Mapulehu trail) and underground via lava tube passages (e.g., Pelekunu-Kamalo underground passage); oral history of fishpond stones on the south shore originating from north shore valleys; the flow of spring water on the southeast shore (e.g., Puaʻahala and Kaʻamola) originating from the north shore (e.g., Pelekunu) and carried via lava tubes into loʻi and fishponds; attestations relating to the source of all tributaries on the northeast and southeast sides of the island originating from a single source, Waiakeakua (water of the gods); and long-held geneaological ties of several Manaʻe families to the north shore valleys prompted an expanded view of the scope of traditional practices and associated native rights. Rather than create a false dichotomy between north and south Molokai and attempt to confine our understanding merely to where the fence locations are proposed; it became evident early on that this report needed to accurately reflect manaʻo on the north shore connections of hoaʻāina who accessed both sides of the island to hunt, fish, and gather. Thus, this chapter on Native Hawaiian rights law; the rationale behind our interview methods and mapping exercises; the assessment of research findings and proposed recommendations are all based on this broader picture.

Recent scholars have introduced more accurate working definitions of ahupuaʻa to mean "culturally appropriate, ecologically aligned, and place specific unit[s] [of land] with access to diverse resources," [101] or "a community-level land-division component that has been implemented in various ways, as part of a larger social-ecological system, with the aim of maximizing resource availability and abundance."[102]

Keeping in mind that not all ahupua‘a fit the generic definition, identification of wao, which modernly can be seen as bio-cultural zones,[103] is a helpful framework for understanding where Mana‘e hoa‘āina traditional and customary practices are concentrated and what types of management actions are most appropriate within each zone. The zones include the following: Wao Akua, Wao Kele, Wao Nahele,Wao Lā‘au, and Wao Kānaka.

The Wao Akua has been described by Handy, Handy, and Puku‘i in *Native Planters* as “the forest of the gods, remote, awesome, seldom penetrated, source of supernatural influences both evil and beneficient.”[104] Dr. Kawika Winter, ethnobotanist and director of Limahuli Garden and Preserve on the island of Kaua‘i, describes the Wao Akua as having these types of ecological, spiritual, and social elements: “sacred, montane cloud forest, core watershed, native plant community, non-augmented” and an area that was “traditionally kapu” (forbidden, prohibited).[105]

Just below Wao Akua is Wao Kele or Wao Ma‘u Kele described in *Native Planters* as the “rain forest” where “giant trees and tree ferns *(‘ama‘u)*” grow “under almost perpetual cloud and rain.”[106] Dr. Winter describes this zone as a “saturated forest just below the clouds, the upland rainforest where human access is difficult and rare, and an area that is minimally augmented.”[107] The next zone is the Wao Nahele described by Dr. Winter as a “remote forest, highly inconvenient for human access; a primarily native plant community; minimally augmented; and [utilized by early Hawaiians as a] bird-catching zone.”[108]

These descriptions of Wao Akua and Wao Nahele largely correspond to experiences shared by Mana‘e kama‘āina, especially in parts where the native, pristine forests are still intact. These are areas that kama‘āina, including hunters tend not to access. In areas that have been penetrated and overly grazed by ungulates, where forests have turned to grass land, and/or where many invasive, non-native stands of vegetation now occur, more hunters have been able to access these areas. However, the length of time to make these journeys high up into the mountain often deter human access except for those most fit and dedicated to make the trek by foot. There are also certain traditional trails, for example, the Mapulehu-Wailau trail, that straddle northeast and southeast face of the island, allowing for access to both sides. Along the trail, some kama‘āina travel from the south shore along the Wao Kānaka, Wao Lā‘au and into the Wao Nahele, and boggy Wao Akua where perpetual rain clouds blanket the mountain top, and make their way down steep pali (sea cliffs) to the north face into Wailau Valley.

The two remaining bio-cultural zones, where most human interaction occur is the Wao Lā‘au and the Wao Kānaka. The Wao Lā‘au is described in *Native Planters* as “the inland forested region, often a veritable jungle, which surmounts the upland *kula* slopes on every major island of the chain, reaching up to very high elevations.”[109] Dr. Winter describes the Wao Lā‘au as a zone of “maximized biodiversity,” comprised of “a highly augmented lowland forest due to integrated agroforestry of food and fuel trees, hardwood trees, construction supplies, medicine and dyes, and lei-making materials.”[110]

The Wao Kānaka is where the early Hawaiians chiefly settled. These were the kula lands, “the sloping terrain between the forest and the shore”[111] that were highly valued and most accessible to the people.[112] These were the areas where families constructed their hale, cultivated the land, conducted aquaculture, and engaged in recreation.[113] Puku‘i describes the extended ‘ohana ko kula uka and ‘ohana ko kula kai living “inland or upland, and some near or on the shore.”[114]

Families living inland cultivated kalo (taro), maia (banana), kō (sugar cane), olonā (native shrub whose bark is used to make cordage), ʻawa root for drinking, medicine, and ceremonial uses, wauke (paper mulberry) to make clothing from pounded kapa.[115] They would share these items with the ʻohana ko kula kai, who contributed by exchanging ipu (gourds), niu (coconut), iʻa (fish), lobster, heʻe (octopus), ʻopihi, and limu (seaweed) that they had harvested.[116] According to Handy and Pukuʻi, collectively, the Wao Kānaka and the Wao Lāʻau provided "the hard wood of the koa for spears, utensils, and logs for boat hulls; pandanus leaves *(lau hala)* for thatch and mats; bark of the *mamaki* tree for making *tapa* cloth; candlenuts *(kukui)* for oil and lights; wild yams and roots for famine time; sandalwood, prized when shaved or ground as a sweet scent for bedding and stored garments."[117]

The presence and access to water was vital to healthy ahupuaʻa and ʻāina momona. In optimal conditions, arable lands were terraced with loʻi kalo (taro patches) fed by ʻauwai (irrigated ditches) from the kahawai (streams and rivers). This system provided ideal conditions for hihiwai (endemic water snails) and the native ʻoʻopu (goby fish) to thrive. Punawai (freshwater springs) formed below as the makaʻāinana created loko iʻa (fish ponds) along the shoreline. Access to sources of water meant wealth, aptly termed as "waiwai" (literally, "water-water")[118] for the abundance water brings to the land.

Wao Kānaka did not terminate at the shore but extended into the sea. Just as the kūpuna identified palena and named various parts of the ʻāina, they also had varied names for the sea:

- *Puʻeone* for the sandy seashore, sand dunes, and sandbar.
- *Kai pualena,* where rivers and streams transporting minerals from the land collide with the sea, mix and churn the water with a golden hue.
- *Kai koholai* for the shallow lagoons located close to shore within the reef's protection.
- *Poʻina nalu* and *kai poʻi* where the waves break along the reef.
- *Kai ele,* the deep, dark blue ocean
- *Kai-popolohua-mea-a-Kāne*, the sea associated with the god Kāne with its vibrant purple-blue and red-brown tones.[119]

Manaʻe kamaʻāina noted rich limu beds, crab and fishing grounds. They identified important types of fish ponds both inland and along the shoreline: the loko puʻeone located inland within the former sand bar; the walled fishponds (loko kuapā and loko ʻume iki) that hug the shoreline and surround areas rich in muliwai, where fresh and saltwater mix. Loko kuapā feature sluice gates called makahā by which fish enter. The kūpuna actively engaged in mariculture within the loko kuapā and several families and entities have restored these ponds in Manaʻe. Loko ʻume iki (fish traps) feature multiple open lanes extending inward and outward to make best use of tidal fluctuations and current flows carrying phytoplankton that attract feeding fish. Fishers utilized these lanes to lay their nets across to capture fish.

Kamaʻāina noted important springs within the ocean. They identified the traditional names of reefs and special fishing grounds that lined up with koʻa (fishing shrines) placed on land. Knowledge of these fishing spots are guarded and kept secret within kamaʻāina fishing families and passed down orally from one generation to the next. Manaʻe kamaʻāina also noted certain reef patches tended to as though they were ocean gardens. These reef patches hold the names of

women fishers of old who possessed the kuleana of mālama (responsibility to care for) these reef patches. Some of them are noted on the old ahupuaʻa maps of the Hawaiian Kingdom and ʻohana can trace their genealogy to these kupuna wahine and, thus their right to these reef patches. Another kamaʻāina attested to his grandmother's practice of building "manini hale" or stone houses in the ocean to attract manini fish. It was also a shelter for the manini when hiding from predators. The manini hale were carefully constructed with stacked stones that provided narrow entry points for the manini, that could withstand the ocean surge, and which could allow for hand harvest at low tide after lifting stones from the top of these structures.

Manaʻe kamaʻāina report that the most adverse impacts to ahupuaʻa health have occurred along the Wao Lāʻau and the Wao Kānaka. Post-contact introduction of ungulates (cattle, goat, and deer) and invasive plant species have altered the landscape, destroyed lowland native forests and impacted rainfall patterns in Manaʻe. Weather patterns have also changed, likely a result of global climate change, with each successive season occurring a month or several months later than usual. Kamaʻāina attest to prolonged drought conditions that were first evident in the 1980s and have progressively worsened over each subsequent decade to the present day. One kamaʻāina mentioned that his crops were affected by the prolonged drought and he is less able to predict whether there will be enough rainfall to water his crops.

The 30-40 year drought has left streams bone-dry or trickling. Historically these streams often ran perennially or filled every time after a moderate to heavy rain. Now they are dry for most parts of the year, except during the rainy, winter months. Stream levels have markedly decreased throughout the Koʻolau/Manaʻe moku: Kamalo, ʻOhia, ʻUalapuʻe, Kainalu, Waialua, Moanui, Honouliwai, Honoulimaloʻo, Halawa, and Wailau.

Denuding of the lower forest from ungulates, poor land management practices, and extreme drought conditions have left the soil brittle and unable to retain moisture. These conditions have directly impacted populations of the native ʻoʻopu (goby fish), a traditional subsistence resource. The ʻoʻopu utilize heavy rains as a reproductive strategy to facilitate mass congregation into the estuary for spawning. In Honouliwai, kamaʻāina have witnessed soil, branches, and natural debris carried down the mountain into the stream and bay from flash flooding events. These events are happening more often than in previous years, and are causing massive die-offs of ʻoʻopu. The presence of large java plum trees along the stream banks also over-shade and absorb tremendous amounts of stream water that degrade the natural habitat for ʻoʻopu and hihiwai. Kamaʻāina are witnessing significantly lowered populations of these two species in streams both in Manaʻe and north shore valleys like Wailau. This has prompted kamaʻāina to take the initiative to clear back java plum trees in Honouliwai and reintroduce native species back into the stream as an affirmative act of mālama. It has also prompted kamaʻāina to exercise self-restraint and encourage others to do so in harvesting some of these sensitive species that are experiencing population decline from habitat degradation.

Without the lowland native forest, there are less trees to trap water and bring moisture through condensation. Kamaʻāina have noticed the disappearance of pepeiao in the Wao Lāʻau, a type of tree fungus and native delicacy because of a lack of moisture in the air. Adaptive strategies of invasive trees and plants that shade out native plants, emit natural phyto-toxins, and over-compete for space have virtually removed precious ground cover and eliminated native

vegetation and biodiversity. A secondary impact is the reduction of water moisture and soakage in the ground. This in turn has affected the viability of spring lines below. Limu gatherers are noticing that prime seaweed grounds that rely on the muliwai from springs entering the shoreline areas are thinning out or have disappeared altogether. Former loʻi kalo (wetland taro patches) have also been overtaken by introduced vegetation. These terraced areas are barely visible today and their ability to ameliorate water soakage and allow suspended sediment from heavy rains to settle into the patches rather than wash into the ocean have been compromised. Nutrient exchange from former wetland taro cultivation into fishponds below are no longer possible. This is due to the dilapidated state of ancient loʻi terraces.

Heavy siltation is also occurring in fishponds and along reefs from land erosion. Areas most affected like Honouliwai and Kaʻamola ahupuaʻa and Keawanui fishpond coincide with unsustainable cattle ranching operations above. Cultural sites such as heiau (ancient Hawaiian temples) have also been trampled in certain areas particularly by cattle. Fishing koʻa that provide a line of sight to secret fishing spots in the ocean have also been compromised by cattle trampling and overgrowth of non-native trees such as kiawe (mesquite). This has had a direct impact on traditional fishing practices.

Similarly, certain land clearing activity has destroyed an important stand of kukui (candlenut) trees in ʻOhia. These trees emitted a purple dye from the bark and was utilized by one of the kamaʻāina families to dye their fishing nets. The ʻohana preferred this variety of kukui to dye their nets over the more common variety of kukui that produces red dye extracts. The purple dye was seen as more advantageous for sustainable fishing practices. The family traditionally surrounded fish with a "bull-pen" technique, selectively harvested desired fish, and safely released undersized and undesired fish because the purple dye was visible enough to the fish to avoid entanglement and gilling.

In ʻAhaʻino, extensive grading and grubbing activities in the mauka region have caused numerous land slides and punctured a major water vein. This has caused springs below to dry out, including a spring that fed a loko puʻuone. Certain vegetation have also dried out below such as lauhala. The area is an important mating and nesting ground for endangered Hawaiian green sea turtles. Kamaʻāina witnessed the death of turtle hatchlings struggling to emerge from their nests where mud from the landslides had covered beach sand.

These kamaʻāina observations underscore the need for a more coordinated management approach from mauka to makai. They also reflect the wealth of knowledge from kamaʻāina families living in Manaʻe, their resilience, and their reliance on natural resources and traditional foods that sustain them. From understanding the language and narrative of the ʻāina, they have expressed the need for comprehensive management along all the Wao and have commented on what actions are most appropriate for each area along the different elevations and gradients.

The following sections in this chapter describe the Native Hawaiian rights that are associated with specific traditional and customary practices in Manaʻe. The sources of Native Hawaiian law derive their origin in kamaʻāina expert knowledge and their traditions.

4.1.6. ‘Ohana Values – The Essence Behind Native Traditional and Customary Practices

As reported, the overwhelming majority of kamaʻāina informants emphasized the need to recognize and respect Native Hawaiian mālama ʻāina values, and agreed that any and all conservation efforts must include access that would allow for Native Hawaiian traditional and customary hunting and gathering rights, as well as any and all cultural practices. When we look at whether something has evolved into a cultural practice, a litmus test is to look at the ʻohana, or the family unit, while understanding that traditionally and in modern times, the ʻohana is central to the life of the land.

Dr. Davianna Pōmaikaʻi McGregor, who has interviewed a large number of kamaʻāina informants residing in “cultural kipuka” (rural areas that have maintained cultural understandings and practices),[120] identified common ʻohana cultural values and customs for subsistence and mālama. It is the essence of these understandings that should be the standard by which to measure whether something is a customary practice or not. It has to maintain the essence of these values. Many of the values and customs included in Professor McGregor’s list were also identified by the cultural informants for this plan.

According to Dr. McGregor, what distinguishes Hawaiian custom and practice is the honor and respect for traditional ʻohana cultural values and customs to guide subsistence harvesting of natural resources. Such ʻohana values and customs include but are not limited to the following:

1) Only take what is needed.
2) Don’t waste natural resources.
3) Gather according to the life cycle of the resources. Allow the native resources to reproduce. Don’t fish during their spawning seasons.
4) Alternate areas to gather, fish and hunt. Don’t keep going back to the same place. Allow the resource to replenish itself.
5) If an area has a declining resource, observe a kapu on harvesting until it comes back. Weed, replant and water if appropriate.
6) Resources are always abundant and accessible to those who possess the knowledge about their location and have the skill to obtain them. There is no need to overuse a more accessible area.
7) Respect and protect the knowledge which has been passed down inter-generationally, from one generation to the next. Do not carelessly give it away to outsiders.
8) Respect each other’s areas. Families usually fish, hunt, and gather in the areas traditionally used by their ancestors. If they go into an area outside their own for some specific purpose, they usually go with people from that area.
9) Throughout the expedition keep focused on the purpose and goal for which you set out to fish, hunt, or gather.
10) Be aware of the natural elements and stay alert to natural signs, e.g. falling boulders as a sign of flash flooding.
11) Share what is gathered with family and neighbors.
12) Take care of the kūpuna who passed on the knowledge and experience of what to do and are now too old to go out on their own.
13) Don’t talk openly about plans for going out to subsistence hunt, gather, or fish.

14) Respect the resources. Respect the spirits of the land, forest, ocean. Don't get loud and boisterous.
15) Respect family 'aumakua. Don't gather the resources sacred to them.[121]

Native Hawaiian law has often been understood as providing access to resources and places important to traditional and customary subsistence and religious practices. The sections above, however, reflect a more multi-dimensional picture of where these rights are properly emplaced:

- In Kānaka Maoli genealogical and cosmological understandings based on reciprocal 'ohana relationships with 'āina that call for a greater kuleana to mālama and that the rights of use and access cannot be severed from the responsibility to mālama.

- In the mind-set of mālama 'āina which involves a way of making decisions that are good for all, rather than sacrificing one interest over the other. This is found in (a) the eight resource realms for which the 'aha councils made decisions; (b) the 'aha kiole decision-making matrix that honors the ancestral past, cares for the needs of the present generation, and provides an abundant future for generations yet unborn; and (c) putting into practice the 'ohana values identified above.

- In the expectation that the ali'i nui, those who were in power and who were living manifestations of nā akua (the gods), were obligated to serve as intermediaries between the gods and the people. They were charged as trustees on behalf of the maka'āinana. The maka'āinana in turn worked the 'āina to make it momona (abundant) through the wise leadership of the ali'i and their konohiki.

- And in the enduring belief that despite the influences of colonization, the privatization of lands and modern practices of excluding and alienating people from accessing the land, the trust relationship still exists and large landowners and government are still expected to make responsible decisions that respect the rights of kama'āina and hoa'āina to continue their traditional practices.[122]

4.1.7. The 'Aha Kiole Serving as a Vehicle for Free, Prior, and Informed Consent (FPIC) Pursuant to the United Nations' Declaration on the Rights of Indigenous Peoples (UNDRIP)

The United Nations, with 143 nations as signatories, adopted the Declaration on the Rights of Indigenous Peoples (UNDRIP) in September 2007.[123] In 2010, U.S. President Barack Obama signed the Declaration and issued an official statement qualifying the United State's position on UNDRIP as non-binding. However, the U.S. position statement provides that America is continuing to meet the spirit of the UN Resolution through its ongoing work on protecting the rights of America's indigenous peoples and strengthening government to government relations with recognized American Indian tribes.[124] Additionally, with its "near universal acceptance" by a majority of countries, this "endorsement gives it strong moral suasion in the international arena."[125]

Some relevant provisions of UNDRIP include:

> Article 26. Indigenous peoples have the **right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired**…[and] have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.
>
> Article 11. indigenous peoples have the **right to…maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites** …
>
> Article 19. States shall consult and cooperate in good faith with the indigenous peoples concerned…in order to obtain their **free, prior and informed consent** before adopting and implementing legislative or administrative measures that may affect them.
>
> Article 29. Indigenous peoples have the **right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources**…
>
> Article 32. States shall consult and cooperate in good faith with the indigenous peoples concerned…in order to obtain their **free, prior and informed consent** prior to the approval of any project affecting their land or territories and other resources …[126]
>
> (Emphases added).

Informed consent lays out the framework for indigenous peoples to make fully informed decisions in accordance with their own "customary systems of decision-making."[127] It requires governmental entities, corporations, developers, and other public and private entities to negotiate with indigenous peoples with the intent of reaching consensus **prior** to implementation of a proposed action. Indigenous peoples also have the **free**dom to consent to or reject a proposal which may affect their ancestral lands that they own, occupy, access, and/or use.[128] (Emphases added).

As the next sections in this chapter will make clear, there are certain vested rights of native Hawaiian ahupuaʻa tenants (hoaʻāina) that have their origins in the ancient land tenure system. This customary law was codified by the Hawaiian Kingdom and later adopted by the State of Hawaiʻi. The State has reaffirmed these rights in its Constitution and statutes. A unique body of jurisprudence has developed around these laws which reflect a heightened obligation by the State and its political subdivisions to reasonably protect traditional and customary Native Hawaiian rights on both public and private lands. The recent passage of Act 288 in 2012 formally created a Statewide ʻAha Moku Advisory Committee within the Department of Land and Natural Resources to "integrat[e] indigenous resource management practices with western management practices[; to] identify[ ] a comprehensive set of indigenous practices for natural resource management; [and to] foster[ ] the understanding and practical use of native Hawaiian resource knowledge, methodology, and expertise."[129] Collectively, these laws and mechanisms reflect a significant step closer to the foundational language found in the UN Declaration on the Rights of

Indigenous Peoples. While not wholly meeting the standards set forth for free, prior, and informed consent, Hawai‘i’s constitutional laws, statutes, and jurisprudence are certainly more expansive than other jurisdictions within the United States.

The ‘Aha Kiole O Moloka‘i and its respective councils on the moku level are self-empowered and self-determined. The Molokai ‘aha councils engage government and private actors from a position that gives them greater parity in making affirmative decisions about the natural and cultural resources that sustain the people. One of the major objectives of this report is to not only accurately document kama‘āina traditional knowledge, mālama practices, and recommended strategies for ahupua‘a-scale restoration and management; but to also appropriately place native community at center stage in the decision-making process and implementation of its own resource management strategy.

4.2. SOURCES OF NATIVE HAWAIIAN RIGHTS LAW

It is within this historical context, that the sources of Native Hawaiian rights law are best understood. As explained in Section 2.4, this Traditional and Customary Practices Report was requested by the ‘Aha Kiole o Moloka‘i - Mana‘e Moku. The ‘Aha Kiole requested the report integrate an ahupua‘a management approach that reflects kūpuna (Hawaiian ancestral) practice and decision-making. The report covers the sources of Native Hawaiian rights law and their relevance to specific cultural, religious, and subsistence practices of Mana‘e kama‘āina. While the ‘aha system today is a modernized version of the ancient framework of natural resource governance practiced on Moloka‘i, the ‘Aha Kiole o Moloka‘i remains true to the essence of the eight realms of decision-making employed by the kūpuna of old: (1) Moana-Nui-Ākea, (2) Kahakai Pepeiao, (3) Ma Uka, (4) Nā Muliwai, (5) Ka Lewalani, (6) Kanaka Hōnua (7) Papahelōlona, and (8) Ke ‘Ihi‘ihi. The recommendations that complement, supplement, and help to inform the East Slope Watershed Management Plan are based on mana‘o shared by Mana‘e kama‘āina informants. Their mana‘o, in may ways, echo the sentiments of ka po‘e kahiko (the people of old) who led with lōkahi and pono in mind.

There are three main sources of law that support Native Hawaiian traditional and customary rights and practices. These sources of law include: Hawai‘i Revised Statutes (“H.R.S.”) Section 7-1, H.R.S. Section 1-1, and Article XII, Section 7 of the State Constitution. In order to understand their meaning and the breadth of what these statutory and constitutional provisions protect, it is necessary to provide the proper historical context for which these laws find their genesis.

4.2.1. The Codification of Customary Law under the Hawaiian Kingdom and Its Modern Adoption and Application under State Law

Through war and conquest waged by Kamehameha, the unification of all the Hawaiian islands was achieved by 1795.[130] Kamehameha established himself as sovereign, and his heirs continued in succession to rule over the Hawaiian Kingdom as a constitutional monarchy up until the 1893 illegal overthrow of Queen Lili‘uokalani and occupation of the islands by the U.S. government. Laws promulgated under the Kingdom of Hawai‘i largely reflect the codification of

Hawaiian customary beliefs and understandings and underscore the trust relationship between the aliʻi nui towards the makaʻāinana.

Early Constitutional Provisions of the Hawaiian Kingdom, the Māhele, and the Reserved Rights of Hoaʻāina

In 1839 Kamehameha III (Kauikeaouli) promulgated the Declaration of Rights, the first document that described the rights of both aliʻi and makaʻāinana and secured their equal protection under the law. If the chiefs, governors, officers of the Kingdom, or land agents violated these equal rights, the Declaration provided that they would lose their honored status.[131] The following year, the 1840 Constitution set forth the nature of ʻāina; the trustee relationship that the King had over the chiefs and people in managing the land; and acknowledged the vested rights among the king, chiefs, and makaʻāinana in the land[132]:

> Kamehameha I, was the founder of the kingdom, and to him belonged all the land from one end of the Islands to the other, though it was not his own private property. It belonged to the chiefs and people in common, of whom Kamehameha I was the head, and had the management of the landed property.[133]

These constitutional provisions laid the groundwork for the events that occurred during the Māhele, the privatization and division of the lands among the king, chiefs, and makaʻāinana. The Māhele introduced a hybridized system fashioned along certain western concepts of private property while retaining certain inherent rights to the makaʻāinana that were grounded in the ancient land tenure system.[134] During the time of the Māhele which began in 1848, Hawaiʻi was transformed from a traditional and communal land tenure system to one based on private property constructs. As the Kingdom was evolving towards a private property regime, it did not wholly adopt a western framework.[135] In 1845, a Board of Land Commissioners to Quiet Land Titles ("Land Commission") was formed to preside over claims made by private individuals holding oral land deeds that were not part of the traditional land tenure system.[136] Once a payment of commutation was made, then the right holder would be issued title in the form of a royal patent.[137] The Land Commission based its decisions "in accordance with the principles established by the civil code" of the Hawaiian Kingdom and "native usages in regard to landed tenures[.]" [138] These principles read in part:

> The same rights which the King possessed over the superior landlords and all under them the several grades of landlords possessed over their inferiors, so that there was a joint ownership of the land; **the King really owning the allodium, and the person in whose hands he placed the land, holding it in trust** …
>
> It seems natural then, and obviously just, that the King, in disposing of the allodium, should offer it first to the superior lord, that is to the person who originally received the land in trust from the King; since by doing so, no injury is inflicted on any of the inferior lords or tenants, they being protected by law in their rights as before; and most obviously the King could not dispose of the allodium to any other person without infringing on the rights of the superior lord. But **even when such lord shall have received an allodial title from the King by purchase or otherwise, the rights of the tenants and sub-**

> **tenants must still remain unaffected, for no purchase even from the sovereign himself, can vitiate the rights of third parties. The lord, therefore, who purchases the allodium, can no more seize upon the rights of tenants and dispossess them …** It being therefore fully established, that **there are but three classes of persons sharing vested rights in the land, -- 1st, the government, 2nd the landlord, and 3rd, the tenant** …[139]
>
> (emphases added)

These principles underscore the trust relationship of the king and chiefs on behalf of the hoa‘āina, the native tenants of the land, those long-time ‘ohana who possessed the most intimate relationship to the land. That these rights are “vested” speaks to what is described in Black’s Law Dictionary as

> Rights which have so completely and definitely accrued to or settled in a person that they are not subject to be defeated or canceled by the act of any other private person, and which it is right and equitable that the government should recognize and protect, as being lawful in themselves, and settled according to the then current rules of law, and of which the individual could not be deprived arbitrarily without injustice, or of which he could not justly be deprived otherwise than by the established methods of procedure and for the public welfare. Such interests as cannot be interfered with by retrospective laws; interests which it is properly for a state to recognize and protect and of which individuals cannot be deprived arbitrarily without injustice.[140] … Immediate or fixed right to present or future enjoyment and one that does not depend on an event that is uncertain. A right complete and consummated, and of such character that it cannot be divested without the consent of the person to whom it belongs, and fixed or established, and no longer open to controversy.[141]

According to McGregor, when the Land Commission principles are understood alongside the 1840 Constitution it is clear that “any one section of land in the Hawaiian Islands is vested with multiple layers of responsibilities and rights.”[142]

The Māhele of 1848 was the Kingdom’s adoption of a private property system that divided out the multiple interests in land. The first stages of the Māhele of 1848 involved the King and 252 chiefs quit-claiming their interests between each other. The lands, now considered freehold, were converted into allodial titles. The chiefs were then awarded royal patents once they paid a commutation fee for these allodial titles.[143] The King dedicated the bulk of his landholdings to the government, while keeping the remainder as crown lands[144] for himself and his heirs. There are 1,124 ahupua‘a and 429 ‘ili names listed in the *Buke Kakau Paa no ka Mahele aina I Hooholoia iwaena o Kamehameha III a me Na Lii a me Na Konohiki ana* (Māhele Book). Most of these ahupua‘a and some ‘ili were subsequently delineated as konohiki, crown, or government lands.[145]

A Boundary Commission was established in 1862 to resolve boundaries of ahupua‘a and ‘ili which were typically granted in name only. These claims were resolved through reviewing testimony of kama‘āina who possessed a comprehensive knowledge of palena in their area.[146]

As one of the early Supreme Court of the Hawaiian Kingdom cases indicates, land surveys and plots alone would not suffice without supporting evidence of kamaʻāina authentication.[147]

All of the Crown, government, and chiefs' lands remained subject to the rights of native tenants. The clause "koe nae na kuleana o na kanaka" is affixed to all LCAs, Royal Patents issued to konohiki, private citizens, Crown and government lands. This clause reaffirms that all lands throughout Hawaiʻi to the present-day are encumbered by "reserved rights of native tenants."[148] The courts to this present day recognize a kuleana reservation attaches to private property holdings in Hawaiʻi.[149]

Hoaʻāina were able to acquire small land-holdings, or kuleana, for themselves through the 1850 Kuleana Act as well as acquire government lands through purchase.[150] The Kuleana Act and the kuleana reservations attached to landholdings reflect traditional and customary understandings that pre-date Statehood and even the time of Kamehameha and his monarchy. These legal provisions represent hoaʻāina relationships to their ahupuaʻa and recognize their rights to access lands from mauka to makai to gather materials for their basic needs (e.g., thatch and aho cordage for making rope and building hale, firewood for imu, ti leaf for wrapping food items, lei-making, and to serve spiritual and ceremonial purposes). Manaʻe families, in large part, maintain a kuaʻāina (country, rural) lifestyle as much of the land remains undeveloped and most have retained traditional, subsistence practices. The exercise of these kuleana rights remain a vital part of the culture.

The Kuleana Act - Hawai'i Revised Statutes, Section 7-1

The Kuleana Act of 1850 protects the rights of hoaʻāina (native ahupuaʻa tenants) to gather specific enumerated items such as firewood, house timber, aho cord, thatch or ti leaf for home consumption and non-commercial use.[151] This provision conveyed the King's concern that "a little bit of land even with allodial title, if they were cut off from all other privileges, would be of very little value [.]"[152]

The act was amended the following year to remove a provision that had required hoaʻāina seek permission before accessing private lands to gather these articles. As the reciprocal relationships between hoaʻāina and the konohiki/chiefs gave sway to western understandings, the people of the land began to suffer and were denied access to areas critical to meeting their basic, daily needs.[153] The amended Kuleana Act (1851)[154] was carried over from the period of the Hawaiian Kingdom into Statehood as Hawaiʻi Revised Statutes, Section 7-1. It reads as follows:

> Where the landlords have obtained, or may hereafter obtain, allodial titles to their lands, the people on each of their lands shall not be deprived of the right to take firewood, house-timber, aho cord, thatch, or ki leaf, from the land on which they live, for their own private use, but they shall not have a right to take such articles to sell for profit. The people shall also have a right to drinking water, and running water, and the right of way. The springs of water, running water, and roads shall be free to all, on all lands granted in fee simple; provided that this shall not be applicable to wells and watercourses, which individuals have made for their own use.[155]

Hawaii Revised Statutes, Section 1-1 on Hawaiian Usage and the Importance of Kamaʻāina Expert Testimony

Hawaiʻi Revised Statutes, Section 1-1 is another source of law that was enacted in 1892 as part of the civil code[156] of the Hawaiian Kingdom and has survived into Statehood.[157] H.R.S. § 1-1 instructs Hawaiʻi's courts to look to English and American common law decisions for guidance, except where they conflict with "Hawaiian judicial precedent, or … Hawaiian [custom and] usage" pre-dating 1892.[158] The origins of this law can be traced even further back to the early period of the Hawaiian Kingdom prior to 1838, when it was acknowledged that the islands were "governed … without other system than [Hawaiian custom and] usage, and with a few trifling exceptions, without legal enactments."[159] Under Kamehameha III, the constitutional monarchy took shape with the establishment of an Executive Department comprised of a Privy Council and Ministers to the King. This was followed by the creation of a Judiciary in 1847 authorized to "cite and adopt '[t]he reasonings and analysis of the common law, and of the civil law [of other countries] … so far as they are deemed to be founded in justice, and *not in conflict with the laws and usages of this kingdom.*'"[160]

This law also encompasses the entire spectrum of Hawaiian traditional and customary practices beyond the specific items listed in H.R.S. § 7-1.

Courts look to kamaʻāina expert testimony as the foundation for authenticating Hawaiian custom and usage. This was first discussed in *Application of Ashford*[161] which relied on "reputation evidence" of a kamaʻāina (native person who was most familiar with the land) over a shoreline boundary dispute rather than accept the conclusions of a certified land surveyor. The court stated:

> Kamaʻāina witnesses may testify to the location of seashore boundaries dividing private land and public beaches according to reputation and ancient Hawaiian tradition, custom and usage. The method of locating the seaward boundaries was by reputation evidence from kamaʻāinas and by the custom and practice of the government's survey office. It is not solely a question for a modern-day surveyor to determine the boundaries in a manner completely oblivious to the knowledge and the intention of the king and old-time kamaʻāinas who knew the history and names of various lands and the monuments thereof.[162]

The premise for this case was based upon the requirements of H.R.S. § 1-1 to look to Hawaiian custom and usage to inform the law.

In many ways the origins and the evolution of Hawaiian rights law are representative of this ʻōlelo noʻeau, "i ka wa ma mua, ka wa ma hope" — our future can be found in the wisdom of the past.

Article XII, § 7 of the Hawai‘i State Constitution -- A Reaffirmation of Native Hawaiian Rights

Article XII, Section 7 of the Hawai‘i State Constitution (1978) reads as follows:

> The State reaffirms and *shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes* and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, *subject to the right of the State to regulate such rights*.[163]

This provision solidifies and enhances H.R.S., §§ 1-1 and 7-1, by making it a constitutional mandate for the State and its political subdivisions to "protect the reasonable exercise of customar[y] and traditional[] rights of Hawaiians to the extent feasible."[164]

4.2.2. Relevant Jurisprudence in Native Hawaiian Law

It was from Mana‘e, Moloka‘i that the first landmark Native Hawaiian rights case emerged in 1982 with William "Billy" Kalipi, Sr. asserting his kuleana rights.[165] The Hawai‘i Supreme Court strictly interpreted H.R.S., § 7-1 in *Kalipi v. Hawaiian Trust Co.* ("*Kalipi*") as protective only of access and gathering rights of native tenants actually residing within the ahupua‘a and that these practices may occur only on undeveloped lands.[166] However, as more cases have been litigated since *Kalipi*, the Hawai‘i Supreme Court has revisited the notion of whether traditional and customary practices are viable only on undeveloped lands. The court's decision in *Public Access Shoreline Hawaii v. Hawai‘i County Planning Commission* ("*PASH*") acknowledged that these traditions exercised on "less than fully developed" lands may also warrant protection.[167]

Most, if not all, of the ahupua‘a, particularly the lowland forests and upper reaches of the mountain areas in Mana‘e are undeveloped or less than fully developed. Kama‘āina families attest to the importance of these lands for traditional subsistence activities and for access to important cultural sites.

In *Pele Defense Fund v. Paty* ("*Pele I*"), the Hawai‘i Supreme Court expanded its ruling in *Kalipi* and acknowledged that gathering rights may extend to other ahupua‘a without benefit of tenancy if it can be demonstrated that this was the accepted custom and long-standing practice.[168] The court gave great weight to kama‘āina evidence and acknowledged that "traditional and customary rights associated with tenancy in an ahupua‘a [may] extend[ ] beyond the boundaries of the ahupua‘a."[169]

Similar to the testimony and affidavits submitted in *Pele I*, several kama‘āina in Mana‘e identified the utilization of multiple ahupua‘a for hunting and gathering. As stated earlier, some Mana‘e kama‘āina travel to the remote, northeast side of the island to gather hihiwai and ‘o‘opu and engage in fishing and hunting activities. Some hunters described ungulate migrational patterns between northeast and southeast valleys that coincide with food availability during different seasons. Traditional trails that transect north and south Molokai such as the Wailau-Mapulehu trail and the underground lava tube passage between Pelekunu and Kamalo also reflect movement to different ahupua‘a to access resources that may not be available. For

example, oral history reflects that in order to construct fishponds on the more protected south shore, ancient Molokai kūpuna formed human chains to hand carry basalt stones from the north. These practices confirm that several Manaʻe ʻohana may enjoy expanded traditional and customary rights beyond their ahupuaʻa of residence.

Another significant case is *Ka Paʻakai O Ka ʻAina v. Land Use Commission* ("*Ka Paʻakai*")[170] wherein the court deemed that state agencies, in this case the Land Use Commission, have "statutory and constitutional obligations" to Native Hawaiians.[171] The court stated that one of those obligations is "to protect the reasonable exercise of customarily and traditionally exercised rights of Native Hawaiians to the extent feasible".[172] In addition to ruling that the Land Use Commission had failed to meet its obligation to protect the reasonable exercise of these rights, the court also mandated that state agencies make an independent assessment regarding the impact of proposed actions on Native Hawaiian traditional and customary practices. The three factors that agencies must consider when making these assessments are:

> "(A) the identity and scope of 'valued cultural, historical, or natural resources' in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;
> (B) the extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and
> (C) the feasible action, if any, to be taken … by the [State and/or its political subdivisions] to reasonably protect native Hawaiian rights if they are found to exist."[173]

These factors under the *Ka Paʻakai* framework are still applicable to any State action affecting Native Hawaiian traditional and customary practices, including those exercised in Manaʻe. The State Department of Land and Natural Resources (DLNR) is the governmental entity administering the overall Hawaiʻi Association of Watershed Partnerships. As such, DLNR must ensure it affirmatively protects Hawaiian cultural practices and rights exercised in Manaʻe.

4.3. TRAILS AND TRADITIONAL ACCESS

Section 4.2 explained the sources of Native Hawaiian rights law and the legal foundation that further protects rights to trails and access. This section provides a focused discussion on how this legal foundation and other laws are applied in the context of trails and access.

Traditionally, trails in Hawaiʻi serve very important purposes and are an integral part of the traditional Hawaiian lifestyle. There were two main types of trails used for distinct purposes, the first being trails that ran perpendicular to the coastline, from makai to mauka. These trails chiefly served the purpose of providing access to the forest, agricultural lands, and ocean resources along the wao nahele, wao lāʻau, and wao kānaka. The second type of trail is better known as alahele (pathway) or alaloa (long road), which typically run along the shoreline and transect multiple ahupuaʻa and/or encircle the entire island. These trails were useful for long huakaʻi, visits between extended ʻohana living in several ahupuaʻa. They were also utilized during the makahiki period when aliʻi accepted their share of the lands' bounty and offerings and tributes were placed on the ahu for Lono, the god of peace.

Under Kamehameha's rule and unification of all the islands, these customary observations were honored. The trails remained open to all classes of people to move freely and safely in accordance with the Kānāwai Mamalahoe or "Law of the Splintered Paddle," the first edict declared by King Kamehameha I in 1797.[174] This law was also adopted by the State of Hawai'i during the 1978 Constitutional Convention to reflect concern for public safety and welfare.[175] Under Kamehameha III's rule the Kuleana Act was promulgated, reaffirming the importance of keeping traditional trails open for hoa'āina to exercise customary access and gathering rights. This provision, later adopted by the State of Hawaii under Hawai'i Revised Statutes, Section 7-1, declared that the "roads shall be free to all, on all lands granted in fee simple."[176] Kuleana reservations attached to landholdings issued at the time of the Māhele and surviving to this day also reflect the supremacy of hoa'āina rights of access along ahupua'a.

Access to landlocked kuleana is protected under Hawai'i statutory and case law. An easement (i.e., the right to cross another's land for access to and from a public road) for access to a kuleana may be created either expressly, or impliedly based on prior existing use, or by necessity.[177] In the instance where an express grant of an easement contains the language of a kuleana reservation, "ua koe ke kuleana o na kanaka," or "reserving the rights of native tenants," this grants an owner of a landlocked kuleana unrestricted right of access through the private land. Even if an original land award does not expressly include a kuleana reservation, a landlocked kuleana owner has a right to access his or her parcel over the surrounding land by way of an easement based on necessity or prior use. An easement may be created by strict necessity where the only access to landlocked kuleana is over the grantor's land or by reasonable necessity where an alternative route is possible, but infeasible.[178]

As the Kingdom entered the world stage, engaged in mass agricultural enterprises and trade with foreigners, greater infrastructure was needed to facilitate transportation and commerce. The passage of the Highways Act of 1892 followed. This law recognized that, "All roads, … trails … whether now or hereafter opened, laid out or built by the Government … are hereby declared to be public highways." With appropriate historical documentation and surveys, the State may exercise its authority under the Highways Act to claim trails that were in place before 1892. Trails may become public right-of-ways through dedication or surrender,[179] or by deed granted by a private landowner.[180] Access along Hawaiian trails may also be protected through an implied dedication of a public right-of-way across private land. An implied dedication of a public-right-of-way is established when there is intention and an act of dedication by the property owner, and an acceptance by the public.[181]

The State legislature created the Nā Ala Hele Statewide Trail and Access System in 1988, a program now housed within the State Department of Land and Natural Resources (DLNR).[182] Under this program DLNR is authorized to conduct an inventory of trails throughout the islands; assess accessibility to these trails; acquire additional trails and access areas for public enjoyment; and promulgate rules for access and use of trails.

Hawai'i's laws are very robust in protecting public trust values; particularly in the field of water law.[183] The developing jurisprudence in this area also recognize the rights of Native Hawaiians and the natural resources associated with the perpetuation of cultural practices as constitutionally protected public trust purposes.[184] The public trust doctrine in Hawai'i derives its origins within

the nature of the trust relationship of aliʻi as mediators of the divine on behalf of the makaʻāinana. This trust relationship seeded the laws of the Kingdom, adhered to lands granted at the time of the Māhele, and survived into Statehood through constitutional and statutory provisions. It is likely then that traditional trails fall within the public trust today.[185]

4.3.1. Application of Trails and Access Protections with the Manaʻe Fencing Project

Kamaʻāina informants identified additional mauka-a-makai traditional trails in Manaʻe such as Kaluaʻaha trail, the Mapulehu-Wailau trail transecting south to north shore, Papalaua trail on the northeast shore, the trail to Moʻoula Falls in Hālawa, and a trail beneath the mountain via lava tube connecting Kamalō in the south to Pelekunu in the north. There are also other unnamed hunting trails throughout Manaʻe. These trails run along both public and private lands. Continued access along these trails should be maintained. As each phased fence line project begins, access along these traditional trails must not be obstructed. Discussions with the EMoWP regarding its proposed fencing project indicated that step-overs would be provided to allow for access. This should be the minimum requirement. A more protective solution would be to ensure that the fence lines do not encroach upon these traditional trails, but run alongside them or be redirected away from these traditional trails.

According to the State's website, the only Nā Ala Hele trail listed for Molokaʻi is the Maunahui Road, more commonly known as the Molokai Forest Reserve Road, that leads to the Kamakou Rainforest in central Molokaʻi.[186] The Manaʻe community may also elect to engage the Nā Ala Hele program to formally register important traditional trails into the Statewide Trails system.

4.4. NATIVE BURIALS AND HISTORIC SITES PRESERVATION

In 1966, the United States Congress passed the National Historic Preservation Act (NHPA) in order to preserve, restore, and maintain the historic and cultural environment of the nation with a view towards "stewardship and trusteeship for future generations."[187] Through this legislation a National Register of Historic Places has been established. The States throughout America also maintain State Historic Registers in concert with the federally administered program. In order to be considered for inclusion into both the national and state historic registers, properties must be a certain "age" (at least fifty years old) and maintain an "integrity" that closely reflects its original state.[188] These properties must also be "significant" in terms of history behind the landscape, architecture, or engineering or their association with specific events, activities, people, or developments that were important in the past.[189] The Hawaiʻi Register also includes sites that are important to Kānaka Maoli and other ethnic groups as part of their history and cultural identity.[190]

The Hawaiʻi State Historic Preservation Division ("SHPD") is housed within DLNR and charged with the obligation to "administer a comprehensive historic preservation program."[191] SHPD is responsible for developing a statewide survey and inventory of historic properties and burial sites,[192] as well as regulating "archaeological activities throughout the State."[193]

As the Manaʻe fencing project moves forward, several State and County permit approvals will be required. Given the presence of many cultural sites and native burials in Manaʻe that are either registered or eligible for inclusion onto the historic register, an archaeological inventory survey [194] must be completed prior to project commencement with SHPD review and concurrence.[195] In addition to conducting an archaeological inventory survey, if native burials are also present, a burial treatment plan[196] subject to approval by the Molokaʻi Island Burial Council is required.[197]

If federal funding is received for the fencing project, this may also trigger NHPA Section 106 review as a "federal undertaking" likely to affect listed and/or eligible historic properties.[198] Section 106 is a consultation process between relevant federal agencies, SHPD, Native Hawaiian Organizations (NHOs), the general public, other stakeholders and interested persons.[199] The federal Advisory Council on Historic Preservation (ACHP) has encouraged participants in the Section 106 process to incorporate the precepts found in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) which was signed by President Obama in 2010.[200] The ACHP underscores Article 18 of UNDRIP which reads as follows:

> "Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions."[201]

The ACHP interprets this provision as consultation that allows for NHOs to "have the opportunity not only to identify those places of religious and cultural importance to them … but also to influence federal decision making in order to protect those places."[202] The ACHP states that the consultation, in order "to be meaningful and effective," should begin as early as possible with an "opportunity to identify and resolve issues, including potential adverse effects to historic properties, while there are still a broad range of alternatives available."[203]

4.4.1. Recommendation to Protect Manaʻe's Historic Sites and Burials in Perpetuity

As mentioned earlier in Section 4.1.7. the ʻAha Kiole may serve as a decision-making body that upholds the traditional and customary rights and practices of Manaʻe kamaʻāina. The ʻAha Kiole o Molokaʻi – Manaʻe Moku may serve as an NHO and consulting party within the Section 106 process. Individual kamaʻāina families in Manaʻe may also request to become a consulting party in this process as well.

A recommended long-term and proactive strategy for protection of culturally significant sites throughout Manaʻe would entail a concerted effort of the ʻAha Kiole o Molokaʻi – Manaʻe Moku to begin identifying sites that are not yet in the federal and state registers of historic places and to formally request their listing.[204] The Society for Molokai Archaeology (SFMA) and the Molokai Enterprise Community Plan have already identified a whole-scale inventory and listing of all cultural sites on the island as a top priority. Some of this work has been undertaken in the Kamalō ahupuaʻa and in Wailau through past partnerships between SFMA, Kamehameha Schools, the University of Hawaii at Mānoa Anthropology Department, the University of Hawaiʻi Maui College – Molokaʻi Education Center, and the Molokaʻi Rural Development

Project. This collaboration resulted in the training of a cadre of community members to serve as Molokaʻi-based archaeological field technicians. The archaeological inventory surveys from those efforts could serve as a starting point for inclusion of cultural sites into the federal and State register. This work is vitally important, particularly since it is a proactive step towards protecting unlisted sites that may otherwise be subject for "data recovery" in the face of approved development proposals. Data recovery sites are subjectively assessed by contract archaeologists who are hired by developers. These sites are considered low value, and low significance and are ultimately destroyed after the archaeologist completes a drawing or visual rendering of the site. Because of prior abuses in other locales throughout the State, it is important to ensure that the archaeologist contracted to do an Archaeological Impact Survey (AIS) is qualified and ethical.[205]

It is important for Manaʻe kamaʻāina to determine for themselves which sites are important to them, so that they may be preserved in perpetuity. The current "data recovery" process in developing and altering landscapes neglects a growing body of knowledge that recognizes the importance of "cultural landscapes." Cultural landscapes are areas indicating interactions between humans and nature that aren't necessarily about environmental subjugation and degradation; rather they reflect "a closely woven net of relationships, the essence of culture and identity."[206] Cultural landscapes are hiding in plain sight throughout undeveloped lands in Hawaiʻi, and are prevalent in Manaʻe's intact ahupuaʻa. The rich heritage of Manaʻe's multiple ahupuaʻa qualify as important cultural landscapes that did not only harbor important heiau (temples), puʻu honua (places of refuge), ahu (stone heaps), and other cultural features. Rather, there is evidence of rich cultivated areas along the wao lāʻau and wao kanaka that are important to the perpetuation of Hawaiian traditional practices. This report attempts to capture their significance to a living and thriving Hawaiian culture in Manaʻe, Molokai that is as equally deserving of protection and restoration as an ancient heiau would be.

In lieu of a comprehensive community-led archaeological inventory prior to the fencing project; a short-term strategy would entail negotiating for non-destructive and non-invasive treatment of all cultural sites, whether listed or unlisted on the register. The ʻAha Kiole o Molokaʻi – Koʻolau/Manaʻe Moku may serve as a representative body in discussions with the EMoWP and SHPD.

Individual families who are lineal or cultural descendants[207] of iwi kūpuna whose resting places are within the proposed project area should also take the time to formally register family burial sites known to them.[208] Families can request that this information remain confidential to the general public as a means to protect native graves from being unearthed or looted for moepū (funerary objects) and artifacts. The benefit of registering known burial sites is that they will be afforded the highest protection under the law. If the East Slope Watershed project proposes to erect fenceline in the vicinity of known burials, SHPD will be able to alert EMoWP to conduct an AIS and develop a burial treatment plan in cooperation with the Molokaʻi Island Burial Council and acknowledged lineal and cultural descendants. In this way, protective and mitigative measures, such as established buffer zones around previously identified burials, and their preservation in place may be included in the burial treatment plan.

4.5. WATER RIGHTS AND THE PUBLIC TRUST DOCTRINE

4.5.1. Legal Framework for Water Law in Hawai‘i

Water law in Hawai‘i is made up of many parts - the Hawai‘i Constitution, the state water code, the Water Commission’s administrative rules, and court decisions.[209] In 1978, Hawai‘i elevated resource preservation to a constitutional mandate when it created constitutional provisions that protect natural resources, such as water.[210] These protections are grounded in the public trust doctrine.[211] Article XI, § 1 and § 7 adopt the public trust doctrine as a “fundamental principle of constitutional law in Hawai‘i.”[212] Article XI, § 1 of Hawai‘i’s Constitution states that “all public natural resources are held in trust by the State for the benefit of the people.”[213] Article XI, § 7 of the constitution lays out more specific directives for how the State should manage its water resources.[214] Article XI, § 7 finds that “[t]he State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.”[215] Furthermore, Article XI, § 7 states:

> [t]he legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define beneficial and reasonable uses; protect ground and surface water resources, watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawaii’s water resources.[216]

In response to Hawai‘i’s new constitutional mandate, the state legislature enacted Hawai‘i Revised Statutes chapter 174C, known as Hawai‘i’s Water Code, and created the state Water Commission to oversee water management.[217] The Water Code details the responsibilities of the State Water Commission and lays out specific directives for managing and protecting ground and surface water in Hawai‘i.[218]

Hawai‘i’s Supreme Court has also given specific instructions on how the constitutional mandates are to be executed.[219] In 2000, the Hawai‘i Supreme Court had the opportunity to use article XI, section 1 and 7 to protect Hawai‘i’s water resources.[220] In *Waiāhole I*, the court reaffirmed the notion that “the public trust doctrine applies to all water resources without exception or distinction.”[221] The court in *Waiāhole I* held that article XI, section 1 establishes the permissible “outer limits” of regulatory codes and thus informs how a court interprets any state or agency regulation.[222]

Moreover, the court in *Waiāhole I* held that the state has the responsibility to conserve and protect all of Hawai‘i’s natural water resources.[223] Summarizing the objectives of the public trust doctrine in terms of water, the court ruled that “in short, the object is not maximum consumptive use, but rather the most equitable, reasonable, and beneficial allocation of state water resources, with full recognition that resource protection also constitutes ‘use.’”[224] The state’s responsibility does not mean that natural resources cannot be impacted or developed. Instead, the public trust doctrine demands controlled development.[225]

4.5.2. Obligation to Weigh in Favor of Protected Public Trust Uses

The public trust doctrine also includes a presumption in favor of protecting public use of public trust resources.[226] Under the common law, protected trust uses included navigation, commerce, and fishing.[227] *Waiāhole I* established that the protection of public trust resources[228] and Native Hawaiian traditional and customary rights are also protected public trust uses in Hawaii.[229] The court in *Waiāhole I* did not list all other possible protected uses of the public trust resources, but the court did hold that "private commercial use" is not a protected public trust use.[230] This means that even though private, commercial uses of water resources may offer benefits to the public, they do not constitute public trust uses under article XI, section 1 of the State constitution.[231]

Additionally, the State also has a duty to weigh competing interests in public resources, always with a presumption in favor of a protected public use.[232] The court in *Waiāhole I* recognized that public and private interests in natural resources often conflict with each other.[233] To remedy this conflict, the court held that the state is constitutionally obligated to balance the public and private use of public trust resources on a case-by-case basis.[234] The court clarified, however, by holding that the State must start with a presumption in favor of "public use, access, and enjoyment."[235] As a result, public trust uses of natural resources are the "norm or default condition" while private commercial uses of natural resources undergo a "higher level of scrutiny."[236]

Overall, "[t]he burden ultimately lies with those seeking or approving such [private] uses to justify them in light of the purposes protected by the trust."[237] This means that the party seeking to use the public trust resource for private, commercial uses bears the burden of demonstrating that the use is "not injurious to the rights of others."[238] Also, "once adverse impact to the constitutional public trust is raised, the applicant's burden is intensified, and the agency and reviewing court must be satisfied that the relevant constitutional test is met."[239]

4.5.3. Obligation to Plan

In *Waiāhole I,* the Hawai'i Supreme Court clarified the State's public trust obligations as trustee of Hawai'i's natural resources.[240] *Waiāhole I* held that "if the public trust is to retain any meaning and effect, it must recognize enduring public rights to trust resources separate from, and superior to, the prevailing private interests in the resources at any given time."[241]

The State, therefore, has an "affirmative duty to take the public trust into account in the planning and allocation of resources, and to protect public trust uses whenever feasible."[242] Overall, "the [S]tate may compromise public rights in the resource pursuant only to a decision made with a level of openness, diligence, and foresight commensurate with the high priority these rights command under the laws of our state."[243] "[T]he trust duty is not limited to analyzing actions or proposals as they arise."[244] Instead, the public trust doctrine must be considered at "every stage of the planning and decision making."[245]

In 2006, *Kelly v. Oceanside* offered an example as to how the public trust doctrine should be applied to agency decisions.[246] *Kelly* held that the State has a duty to ensure that the conditions set by agency regulations are met.[247] Moreover, *Kelly* ruled that the agency's "discretionary

authority is circumscribed by the public trust doctrine."[248] This means that in instances where a state agency is granted discretionary authority to exercise its power through a state statute, the agency cannot ignore its public trust duties, and decisions to exercise that authority must be informed by public trust principles.[249]

4.5.4. Duty to Conserve Public Trust Resources for Future Generations

The court in *Waiāhole I* recognized that there is a constitutional requirement to protect and conserve Hawai'i's natural resources and that this requirement is based on a historical understanding that the trust is a public right.[250] The constitutional framers felt that it was important to expressly state that protection of natural resources is for the benefit of present and future generations "because it affirms the ethical obligations of this generation toward the next and is entirely consistent with the concept that the Constitution should provide for the future."[251] Ultimately, the public trust doctrine advocates for "a controlled development of resources rather than no development."[252] Thus, the State is not obligated to never develop or use trust resources for private, commercial gain, but rather, the public trust requires that the State develop the resources in a manner that ensures long-term protection and beneficial use of the resources.[253]

In *In re Wai'ola,* the Supreme Court of Hawai'i also clarified that the State assumes the role of trustee over trust resources, and is not just a "good business manager."[254] The legislative and executive branches of state government are "judicially accountable for the dispositions of the public trust," "just as private trustees are judicially accountable to their beneficiaries for dispositions of the res."[255] As an added measure, judicial review protects against thoughtless use of the public trust.[256]

4.5.5. Water Law as it Applies to the Mana'e Streams and the Proposed East Slope Watershed Management Project

Many of the streams on the South East slope of Moloka'i are culturally, spiritually, and environmentally significant sources of water and streamlife. The Mana'e community still relies on the streams for freshwater fish and other resources. Based on the interviews, Pelekunu Stream is a source of Tahitian prawn, hīhīwai, 'o'opu and 'opae. Hālawa Stream is a big stream that carries big fish, such as 'ulua, that feed on the 'opae. Hālawa stream also has 'o'opu that rely on the mauka to makai stream flow for survival and reproduction. 'O'opu are also found in the Haka'ano Stream. Honouliwai Stream carries hīhīwai, small mullet, and 'aholehole as well. Several interviewees mentioned that the number of hīhīwai in the streams is depleting. Kama'āina informants noted that in Pipio Stream there is no hīhīwai because there is not enough water. One informant mentioned that within the last 12 years, the spring water died at Honoulimalo'o Stream so the interviewee needed to run a pipe further up the stream to get water. In addition, another interviewee mentioned that Moanui Stream does not run anymore because there is a diversion by Pu'u o Hoku Ranch. Many community members also rely on the freshwater for lo'i. Waialua and Pipio were specifically mentioned as having lo'i along their banks. Several Mana'e communty members also recognize the cultural importance of the streams in the area. Waialua, for example, is alluded to in many oli and mele.

Under the public trust doctrine, the community's right to gather fish and other natural resources

that depend on the freshwater is protected as a public trust purpose. As articulated in *Waiāhole I, In re Wai'ola,* and *In re Kukui,* the exercise of Native Hawaiian traditional and customary rights, including the right to gather natural resources that depend on freshwater, is a protected public trust use of the water.[257] As a result, any alternative use that may impact Native Hawaiian's use is reviewed with heightened scrutiny.[258] In other words, the law protects Native Hawaiians' traditional practice of collecting 'o'opu and hīhīwai from the streams. If any entity pumps more ground water for a non-public trust use, like a private, commercial business enterprise, it must show that the non-public trust use will not damage the protected public trust uses.

4.5.6. Moloka'i's Designation as a Ground Water Management Area and Heightened Protections if Also Designated as a Surface Water Management Area

Moloka'i is currently designated as a Ground Water Management Area ("GWMA"), which means that the Water Commission more heavily scrutinizes proposed uses of Moloka'i's ground water.[259] However, Moloka'i has not been designated as a Surface Water Management Area (SWMA).[260] The Water Code also regulates the use of surface water. The Water Code requires that all stream diversions are registered.[261] The Code defines a stream diversion as "the act of removing water from a stream into a channel, pipeline, or other conduit."[262] The owner or operator of a stream diversion must monitor his/her water use and submit monthly reports to the Water Commission.[263] These reporting requirements for stream diversions are in place even if a diversion is not located in a surface water management area.[264] As a result, even though Moloka'i is not a surface water management area, all pre-existing stream diversions in Moloka'i should have been registered with the Water Commission by 1988 and all newly created diversions should be subsequently registered as well.[265]

Some informants expressed concerns about alleged diversions by Pu'u o Hoku that takes water from Moanui Stream and diversions along Kahawai'iki, Puniohua, and Pu'u Elelu Streams. If there are diversions, these diversions must be registered with the Water Commission and the water use must be reported as well. Because Moloka'i is not a SWMA, owners or operators of diversions do not have to obtain a water use permit to divert water from the streams as long as he/she reports the use to the Water Commission.[266]

Designating Moloka'i as a SWMA would give the Mana'e community the same type of heightened protection for its surface water that it currently enjoys for its ground water. The public trust doctrine only applies to the State of Hawai'i and it's political subdivisions, not to private actors.[267] As a result, without state involvement in the surface water management, the community may not be able to utilize the public trust doctrine to protect its surface water.

Surface water management area designation will give the community the necessary legal protections to ensure that the Water Commission, a state agency, is fulfilling its public trust obligations in all decisions that it makes. Without surface water management area designation, however, private owners and operators of diversions are not constitutionally and legally obligated to consider the public trust when diverting water.

4.6. SUBSISTENCE HUNTING - AN EMERGENT CULTURAL PRACTICE AND RIGHT

4.6.1. Revisiting the First Watershed Partnership in East Molokaʻi: Kamalō/Kapualei

In 1998, The Nature Conservancy introduced the concept of forming an East Molokai Watershed Partnership (EMoWP) between the state government, private landowners, and community members in Kamalō and Kapualei ahupuaʻa. Former cattle ranching and heavy grazing from deer and goat had destroyed the native lowland forest. Each year goats were further encroaching into the higher reaches of the native, pristine forest, the most important feature of the watershed. Unchecked erosion on the mountain jeopardized reefs and fishing grounds below with every heavy rain. TNC requested community buy-in to erect a 5.5 mile long lateral fence to straddle and protect the 30,000 acres of remnant native forest. TNC secured a trained, local workforce to erect the fenceline. The two large landowners acquiesced to having their lands fenced and provided permission to community hunters to thin out animals below the fenceline as well as participate in aerial hunts.

Today, over a decade and a half later, TNC and the community have a greater grasp of the advantages and drawbacks of fencing. The upper rainforest above the fenceline has recovered. Everything below the fenceline is denuded. Animals have migrated further east into neighboring ahupuaʻa to access food. These areas are now overgrazed and prone to erosion and landslides. A local shrimp farm and the loko kuapā at Keawanui were inundated with mud several years ago during a heavy rain event. This was caused by erosion contributed by cattle ranching mauka of the shrimp farm and fishpond, as well as an increasing number of feral deer and goat that had migrated to the ahupuaʻa after the Kamalō-Kapualei fenceline was erected.

While residents in neighboring ahupuaʻa observe a degrading landscape, Kamalō residents notice marked improvements, particularly to shoreline resources. Even though below the fence line Kamalō residents see that the land is overgrazed, the fact that the upper native forest has been able to recover due to the protective fenceline has been enough to reduce some of the siltation into Kamalō streams and along the shoreline. This has resulted in noticeable recovery of Kamalō crab, fishing, and limu grounds.

Building on the overall successes at Kamalō-Kapualei, the EMoWP began to circulate a draft proposal in 2013 for an expansion of the EMoWP to potentially run along the entire length of Manaʻe. Ideally, the fenceline would intersect approximately seventeen (17) miles of mountain range and thirty-six (36) ahupuaʻa.

In forming the most effective plan for simultaneously protecting the watershed and preserving native Hawaiian rights in Manaʻe, it would be beneficial to summarize the varied viewpoints of kamaʻāina and their initial thoughts on how the proposed fenceline affects their rights and cultural practices, both positively and negatively. The following is a summary of the varied perspectives of Manaʻe kamaʻāina, as well as some feedback we received from large landowners. All kamaʻāina agreed that something had to be done, especially given the island's prolonged

drought situation that has caused some visible changes even in Manaʻe, a place that has been traditionally greener than other parts of Molokaʻi.

4.6.2. Kamaʻāina Offer Differing Viewpoints on Fencing and Hunting

Kamaʻāina shared mixed feelings about the expanded fenceline proposal. The thought of laying a fenceline across the entire length of Manaʻe made some hunters leery because a high percentage of mountain areas in Manaʻe are privately owned and it has already been a hardship for hunters to maintain their subsistence practices without being criminalized for trespassing. For them, the fence represented a direct threat to and lack of regard for their subsistence livelihood. One hunter expressed the following sentiment, "All my life I been jumping over fences to hunt and feed my family. I no like see any more fences!"

This sentiment echoes aloha ʻāina activist and president of Pele Defense Fund Palikapu Dedman's concerns about increased State-sponsored conservation fencing on the Big Island, "Before you know it, everywhere is a pristine area and it's more and it's more and it's more. And our culture is slowly getting pushed away and out." Animal eradication efforts there have angered hunters like Palikapu, "They go in and kill all the pigs and everything else. Then you eliminate the hunter. I think that the hunter has been ignored and it's the state's responsibility to look out for them, too."[268]

To avoid a backlash from Manaʻe hunters, EMoWP made sure to consult with both the ʻAha Kiole as well as form a working group of Manaʻe hunters to craft an acceptable proposal for the East Slope Watershed Management Plan. Several kamaʻāina also took part in an aerial survey of the Manaʻe mountain range to discern for themselves the condition of the upper rainforests and ahupuaʻa health overall. The Office of Hawaiian Affairs also stepped in on behalf of the ʻAha Kiole to gather additional manaʻo from Manaʻe kamaʻāina as part of this Traditional and Customary Practices (TCP) report.

One kamaʻāina who is an avid canoe paddler and original crew member of the Hokuleʻa expresses a great reverence for the native forest. She also makes beautiful lei and haku from native plants she gathers from the forest. She is frustrated about hunters asserting rights that include keeping animals on the mountain as a food source while she witnesses the forest diminish in resources and in spiritual mana as Wao Akua. She asserts that it is inappropriate for hunters to claim that hunting is a traditional and customary Hawaiian right, especially because goat, deer, and pig are introduced species. Thus, she fully supports a fenceline and believes that any concession to hunters equates to an infringement on her traditional practices and rights. She contends, "We all talk about the ʻāina being our ice box because we rely on the ʻāina to feed us and provide for all our needs. It's time we all admit that the ice box is broken and we have to fix it."

Other gatherers who access the lower mountain forests expressed the decline in resources that they attributed to overgrazing and change in habitat brought on by goat, deer, and pig. Ocean gatherers and fishermen also felt the same in that limu (seaweed) grounds, crab grounds, fishponds, and the reef are choked with silt and mud carried down the eroded mountain during heavy rains.

Another kamaʻāina, a subsistence fisherman, hunter, and gatherer who understands the different sentiments of various cultural practitioners, spoke from a unifying standpoint and deep love for Molokaʻi Nui A Hina (Molokaʻi Great Child of Hina), "What is our purpose? To take care Hina or protect hunting? Some things we no can compromise. If we take care the ʻāina, the momona going come back." This kamaʻāina recommended that the proposed fence line be lowered to protect not only the upper remnant forest, but also the damaged area where the lowland forest used to exist. He supports aggressive strategies to remove invasive species and replant natives to restore the lowland forest in addition to protecting the upper remnant forest. He cited precedent during the Hawaiian Kingdom period for constructing stone walls to protect the forest. He pointed specifically to the long stone wall at mid-elevation that traverses several ahupuaʻa on Molokaʻi from Kamalō to Makakupaia which was used to keep cattle from trampling vegetation.

A kamaʻāina hunter and kiaʻi loko (Hawaiian fishpond caretaker) also likened the stone wall enclosure of the loko kuapā to the proposed fenceline on the mountain. He felt building walls is a culturally appropriate practice. Where a loko kuapā is a walled fishpond made of stones to protect and cultivate fish; the metal fenceline is a modern-day kuapā on land that is used to protect the precious native forest within.

Some large landowners are wary of having hunters on their land because of liability issues from any injuries sustained on their property. Other landowners are open to providing access, but wish that hunters would have the courtesy of asking permission first. These landowners want to make sure that hunters are utilizing safety measures. They also wish to have open communication with hunters to let them know which areas to hunt and which to avoid in order to safely conduct land management activities. The practice of cutting fences angers large landowners and interferes with their land management, especially if they are raising livestock. Distrust has been fueled on both sides. Some large landowners want a win-win situation where hunters can feel free to hunt, but also give back to the landowners that allow them to hunt on their property. For them, this could be in the form of hunters helping to fix fences and equipment, or doing some kind of conservation work on the land.

Other hunters were okay with EMoWP's compromise measure of having step-overs installed along the fenceline to allow for access into the protected forest. They were willing to make sacrifices in order to restore and protect the native forest so that they could leave the resources in better condition for their children and grandchildren.

Some elder hunters expressed disappointment in the younger generation of hunters who lack respect for the forest by using ATVs that tear up sensitive habitat; waste meat by only taking choice cuts and leaving the rest of the carcass to rot in the open; collect racks for prestige and post pictures of trophy racks on social media sites like Facebook and Instagram. The older hunters felt that the young people were losing the Hawaiian cultural values of mālama. They described pono approaches to hunting: to mindfully walk the land to assess the health of ahupuaʻa resources; select animals carefully, not just trophy bucks but with a mind for conservation and that preserves the health of the herd; harvest according to need and for subsistence; bury the entrails and bring the rest of the animal home to feed the family.

Some hunters expressed concern about the long fence line impeding the seasonal migration of animals moving back and forth from the north shore to the south shore. Hunters explained that pigs follow the appearance of guava, mountain apple and other foods that are in season at different times of the year and in different places. One hunter also explained the stages of development in deer and how their food requirements change over time. He noted that deer in their senescence seek higher ground to fulfill their food and mineral requirements.

The EMoWP sought to respond to these hunter concerns by including as an alternate plan an open corridor that would span the length from Waialua ahupuaʻa to the Pakaikai/Puʻu O Hoku region. The initial thought was that this corridor would allow for the animals to migrate between the north and south shore as well as leave Pakaikai open as an important hunting area. Much of the land is owned by Puʻu O Hoku Ranch. The EMoWP has had difficulty in securing a commitment from Puʻu O Hoku Ranch to join the watershed partnership. For these reasons, the EMoWP thought this proposed open corridor might be a win-win for all. However, several ahupuaʻa with important streams (Waialua, Honouliwai, and Honoulimaloʻo) are located within the proposed corridor area. Some reside on kuleana lands within these ahupuaʻa and rely on streamwater for both traditional agriculture (e.g., loʻi kalo cultivation) and domestic purposes. Some of these families who are tucked back along dirt roads that lead deeper into these valleys do not have hook-up to county water and must rely exclusively on the quality and purity of streamwater. Their very real concern is that if every part of Manaʻe is fenced except for their area, an inordinate amount of hooved animals will be forced to migrate there and foul the precious water resources in that region as well as damage important cultural sites such as the King's Bath in Waialua and the ʻawa cups (ʻapu) carved into stone at Pakaikai. For these kamaʻāina, they advocate for an all-or-nothing solution. It is either "all-fence" to run the entire length of Manaʻe and protect all resources, or "no-fence" at all, so that some ahupuaʻa are not sacrificed for others.

Some kamaʻāina felt that a fenceline was not the answer at all; that it only would serve to keep Native Hawaiians out. The answer instead would be the return of konohiki practices of those who possess the knowledge to manage whole-scale ahupuaʻa. Some of these kamaʻāina were very skeptical about partnering with certain large private landowners; especially those who have a bad track record in caring for the resources and who routinely have Hawaiian cultural practitioners arrested for trespassing their land while in the act of hunting, gathering, holoholo, visiting wahi pana (sacred, cultural sites), and enjoying the streams and waterfalls. They were also distrustful of the ʻAha Kiole as proper representatives of their concerns. They were more focused on caring for their own ahupuaʻa resources rather than formally submit to the ʻAha Kiole process on an island level and a Manaʻe moku level. They only agreed to be interviewed to ensure that their manaʻo be respected by other Manaʻe kamaʻāina, the ʻAha Kiole, the State, TNC, and the private landowners participating in the watershed partnership.

Others felt that fencing is a good tool in conservation, but it is not the only tool. They felt more comfortable in supporting a holistic plan that integrates Native Hawaiians and locals in all aspects of ahupuaʻa management. This would entail having locals and Native Hawaiians hired to conduct fencing and monitoring work. It would also mean securing funds to hire a local and native workforce to restore lowland forests below the fenceline that have been completely destroyed and altered by ungulates; develop native plant nurseries at the cottage-industry level

for Manaʻe families; re-open loʻi terraces and other agriculture features; restore wahi pana and other cultural sites, including koʻa (fishing shrines); restore fishpond walls and remove mangrove; and clean the shoreline and reefs of invasive limu (seaweed).

A few kamaʻāina advocated for a simple and small-scale approach that would entail building the fence line incrementally, a few ahupuaʻa at a time, so that there is opportunity to study and monitor the effect on the watershed, forest, overall ahupuaʻa health, hunting, and Hawaiian cultural practices. One kamaʻāina suggested that EMoWP can explore adding more fence line, ahupuaʻa by ahupuaʻa, after they've studied the effects in each place and have made improvements and adjustments with each project.

Another kamaʻāina who is a pig hunter, fisherman, and also commutes to Oʻahu to do conservation fencing work there explained that small, fence sub-units that are manageable and capable of being maintained is ideal. Fence lines fall into disrepair. Animals can infiltrate these areas and graze on vulnerable native forest land if monitoring and maintenance is not a regular part of management. This individual who also has strong ancestral ties to kuleana lands on the north side of the island also cautioned against erecting a long fence across the entire length of Manaʻe (southeast) and trapping animals on the north shore. In time, they could cause greater harm to the more pristine and water-rich valleys on the north shore and defeat the intent of a watershed partnership.

This report attempts to discern whether a middle ground is available for all stakeholders. This report seeks to address concerns raised by kamaʻāina hunters and the need to protect and repair Manaʻe's upland, native forests; to accommodate all traditional and customary Hawaiian practices that may potentially overlap and conflict; and to suggest ways of achieving an amicable watershed partnership between the State, private landowners, TNC, and the local and native community of Manaʻe. The very process of interviewing Manaʻe kamaʻāina; working with the ʻAha Kiole o Molokaʻi – Manaʻe Moku; receiving guidance from the Office of Hawaiian Affairs; collaborating with TNC's experienced leaders and conservation workers on the ground; and sharing manaʻo from EMoWP partners and their hunters' working group has been a rewarding and invaluable experience that is already paving a hopeful path forward.

The following sub-section will cover impacts of introduced ungulates on Molokaʻi's native ecosystem, overall ahupuaʻa health and associated Native Hawaiian Traditional and Customary Practices. This is to address whether the presence of large game is in fact infringing on certain traditional and customary Native Hawaiian practices.

Next will be an exploration into whether hunting itself is a traditional and customary Hawaiian practice and right as some kamaʻāina assert. This will entail a review of relevant constitutional and statutory provisions and court decisions, particularly a new legal opinion issued by the Hawaiʻi Intermediate Court of Appeals in December 2015 that addresses whether pig hunting is a traditional and customary Hawaiian right.

The next sub-section will cover whether potentially conflicting Native Hawaiian rights and practices can coexist and whether they can be reconciled, especially within the context of the proposed East-Slope Watershed Management plan.

Finally, the last sub-section will determine whether a middle ground can be achieved among stakeholders. This entails looking also to the role the State Department of Land and Natural Resources (DLNR) plays as the lead government agency that administers the watershed partnership program. This section explores the State's duty to affirmatively protect Native Hawaiian rights to the extent feasible, balanced with its authority to reasonably regulate these rights.

4.6.3. Impacts of Large Grazers on Molokaʻi's Native Ecosystems, Ahupuaʻa Health, and Native Hawaiian Traditional and Customary Practices

A Brief Overview of Studies on Ungulate Impacts to Hawaiian Ecosystems Generally and Molokaʻi Specifically

The geographical isolation of the Hawaiian Islands created a unique and fragile ecosystem preceding the first human migrations from Polynesia between 300 and 600 A.D.[269] Birds, insects, and plant seeds arrived through sea and wind dispersal.[270] Plants lost their natural defenses that once protected them from grazers.[271] Over millenia, new species evolved and developed that exist nowhere else on the planet.

The puaʻa or Polynesian pig was the first hooved animal brought to Hawaiʻi during the Polynesian migrations.[272] Descendant of the wild Asiatic swine (*Sus* scrofa subsp. *vittatus*), it was smaller than the wild pig known today in the Islands.[273] The puaʻa was a domesticated animal and food source for the ʻohana.[274] Polynesian pigs were usually housed in pā puaʻa (pig pens), remained within the kauhale (ʻohana compound) and foraged in the lowland forest.[275] At post-contact, European pigs first brought over by Captain Cook in 1778 and from other foreign vessels over the years, interbred with the puaʻa to create the larger feral pig known in Hawaiʻi today.[276] As this new pig variety grew in numbers, they spread further up into the mountains.[277]

Wild pigs eat a variety of food, depending on whatever is available; they will eat hapuʻu tree ferns, waiawī (strawberry guava), and poka maiʻa (banana).[278] They alter native forests by carrying seeds of invasive plants in their gut and on their coats. They also trample on native plants. Through their rooting behavior and fecal waste they create soil conditions that are ideal for invasive plants to grow and outcompete native vegetation that are more adapted to nutrient-poor soils.

Domestic goats were also introduced first to Niʻihau upon Captain Cook's arrival in 1778, then on Kauaʻi in 1792 on Captain Vancouver's journey.[279] An 1850 record of 26,519 goat skins exported to the continental U.S. provides an indication of how huge the goat population expanded over the islands within just seventy-five years from their introduction.

Goats eat both native and non-native plants. A former study of stomach contents of feral goats located at Volcanoes National Park revealed a preference for native vegetation when it is in abundant supply and when there is a low density of other goats to compete with.[280] Through seeds propagated from their feces and also carried on their fur, goats also facilitate the recruitment of invasive plant species that outcompete native vegetation.[281] It has been

documented on the Big Island that goats have destroyed the native mamane forest and caused habitat loss to the endangered palila, the native finch-billed honeycreeper.[282] Today, feral goat populations dominate a wide habitat range from low to high altitudes and wet to dry habitats.[283] They have been described to be "the single most destructive herbivore," especially on island ecosystems worldwide.[284]

Eight axis deer were brought to Hawai'i in December 1867 and released on the island of Moloka'i in January 1868.[285] Deer herds established themselves on other islands in the latter part of the 19th century (around 1898 at Diamond Head and around 1910 in Moanalua Valley on the island of O'ahu) up until mid-way into the 20th century (1920 on Lāna'i, 1959 on Maui).[286] The deer population on Moloka'i increased rapidly from eight deer to one-thousand within two decades. By 1900, the deer population had grown to an estimated 7,500 before animal control measures were put in place to thin the population down to half the original size.[287] The deer's primary habitat is among the grasslands. They are rarely found above an altitude of 3,500 feet.[288]

Overall, ungulates in Hawai'i degrade and replace entire native ecosystems, often leaving behind grasslands dominated by introduced species.[289] The destruction of Moloka'i's endemic forests coupled with cattle ranching, sugar cane and pineapple agriculture caused major land erosion and siltation of the island's fishponds and reefs.[290]

Moloka'i's east-west, elongate shape and the natural protection afforded its south-facing shore by the islands of Maui, Kaho'olawe, and Lāna'i have provided the optimal conditions for the natural development of an extensive fringing reef [291] as well as an ideal location for high-density fishpond construction. However, the very nature of the protected coastline, "the relatively weak wave stresses and the coast-parallel transport" also hampers flushing of sediments that settle on the reef.[292] Sediment is 5-15 cm. thick on the inner reef flat.[293] These sediments resuspend in the water column, causing turbidity and blocking out sunlight for photosynthesis of microalgae present within coral tissues. The sediment then re-settles back onto the reef during calm conditions.

The fishponds also act as silt traps.[294] In 1902, the American Sugar Company introduced the Florida red mangrove (*Rhizopora mangle*) to stabilize the shoreline and capture silt carried by heavy rains down the mountain.[295] Mangroves today dominate Moloka'i's fishponds and plug up coastal springs. The natural sediment flushing mechanism of the kūpuna-engineered mākāhā (sluice gates) no longer function properly due to the presence of mangrove that accrete and hold sediments,[296] as well as alter the water flow and currents entering these ponds.

Kama'āina Observations of Degrading Health of Mana'e Ahupua'a Resources and their Impact on Hawaiian Traditional and Customary Practices

As explained above, traditional gathering for lei-making is one of the cultural practices that are threatened by the presence of ungulates who have altered the landscape and made it difficult for kama'āina to gather. There are some plants that only exist in the Wao Nahele and Wao Akua such as maile and certain types of native ferns. For lei makers as well as hula practitioners, preserving the last vestiges of native forest is critically important.

As mentioned earlier in Section 4.1.5. of this chapter, Manaʻe kamaʻāina have noticed many changes in ahupuaʻa health that they attribute to the presence of large grazers such as cattle, goat, and deer. Much of the lowland native forest has been destroyed and invasive plant species have gained a strong foothold in areas that makua and kupuna-aged informants once knew to be dominated by native plants. Kamaʻāina are also noticing severe drought conditions that have lasted for decades and worsened over time. They are unsure whether the drought is the result of global climate change; but they know that the dying native forest is not as effective in catching rain as it used to be.

Kamaʻāina are noticing that there is less moisture along the lower mountain slopes and the lowland forest has been replaced with invasive kiawe, java plum trees, thorny plants, and grasses. It is more difficult to find pepeiao, a native fungus and delicacy that grows on trees.

Mahiʻai (farmers) are also suffering. One kamaʻāina from Honouliwai who relies completely on rainwater because there is no county infrastructure, mentioned that his crops are suffering and he is less able to gauge whether there will be enough rainfall to sustain his crops.

A common saying and observation made by kamaʻāina is that "what happens mauka impacts makai." Streams that used to flow perennially or flowed quite often are now dry or low. Springs are drying up. It is more difficult to find seaweed like huluhuluwaena and ʻeleʻele that need an infusion of clean, uncontaminated freshwater seeps along the shoreline.

The taro terraces are overgrown with invasive plants and trees. There is no longer nutrient exchange and water moving efficiently through the ahupuaʻa to feed spring lines below, promote limu growth, and create the muliwai (brackish water) that supports fishponds and estuarine environments.

A kamaʻāina from Honouliwai ahupuaʻa has restocked the stream there with ʻoʻopu and hihiwai that he gathered from pristine streams on the north shore of Molokaʻi. These native, diadromous species live a portion of their life cycle in the stream and a portion in the ocean. The kamaʻāina informant actively engages in mālama through cleaning the stream and cutting back java plum trees that shade out stream habitat and absorb too much water. During heavy rains, massive amounts of topsoil, branches, and other forms of natural debris are washed down into the stream because of poor land management practices and the presence of deer that have altered and eroded the landscape above. This has caused massive die-offs of ʻoʻopu and hihiwai in the stream which are also a food source for Native Hawaiians.

Ahupuaʻa have been generally described as running "from the mountain to the sea" and providing for the chief and his people "a fishery residence at the warm seaside, together with the products of the highlands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land. ... [B]oth inland and shore fishponds were considered to be part of the ahupuaʻa and within its boundaries."[297] Dr. Carlos Andrade describes ahupuaʻa fisheries as being well "cared for as if they were extensions of [ ] gardens" tended just as carefully and intentionally as the "gardens filling coastal plains, stream-lined valleys, and forest clearings in the uplands."[298]

Evidence of mālama i ke kai (ocean stewardship) is strongly prevalent in several kamaʻāina interviews. These practices are mentioned here for two purposes. Firstly, the full import of the effects that "upstream" uses have on "downstream" activities isn't always obvious. And secondly, understanding the impacts ungulates have on Hawaiian cultural practices is important to the question of what role the State must play to ensure that these practices can continue. Unchecked sediment deposits from eroded landscapes into the ocean impact marine ecosystems and have a ripple effect on traditional subsistence and other customary practices.

Cattle ranching on the mountain slopes of Kaʻamola and eastern migration of goat and deer from the Kamalō-Kapualei area have caused landslides and siltation into Keawanui fishpond. Hui o Kuapā and the Hawaiian Learning Center have been actively restoring the ecology at Keawanui fishpond by repairing the kuapā (wall), reopening springs that feed the pond, and raising fish, limu, "live-rocks" for the aquarium industry, and Hawaiian oysters in a natural environment. The fishpond workers have had to build berms to protect springflow and prevent the fishpond from becoming a silt-trap. They have had to adapt to these less-than-ideal conditions by utilizing the dead branches of invasive mangrove as vertical substrate placed in the water column for seaweed recruitment (e.g., limu ʻeleʻele) that would otherwise be smothered by mud that has accumulated in the pond from deforestation above.

Several Manaʻe kamaʻāina informants identified key fishing koʻa across multiple ahupuaʻa. Koʻa are secret fishing spots in the ocean that are known by Hawaiian families and passed down from generation to generation. These fishing koʻa correspond with koʻa on land, fishing shrines that serve as markers or lines of sight to fishing grounds in the sea. A portion of fishermen's catch are also left at the shrine as offerings to the fishing god Kūʻula. ʻOpihi (limpet) shells are left upturned so that sunlight will reflect off of the shiny inside of the shells and serve as a beacon and line of sight for fishermen attempting to locate their special fishing grounds.

The introduction of ungulates such as goat, deer and cattle have caused severe damage to fishing koʻa. Many of the fishing shrines have been trampled, resulting in either a complete loss of traditional knowledge of special fishing locations or, at minimum, severely hampering successful fishing ventures. Cattle ranching in former lowland native forest areas has been particularly destructive of these fishing shrines. The growth of invasive kiawe that have overtaken former native and endemic vegetation has also hindered lawaiʻa (fishermen) from finding their ocean koʻa. This has prompted some kamaʻāina to recommend that the footprint for the proposed fenceline be relocated lower down the mountain to not only protect the native, pristine upper remnant forest, but also allow for the restoration and protection of the original native, lowland forest.

One kamaʻāina informant explained the practice of his grandmother and the women before her in building "manini houses" that are constructed of stones piled in a heap under water which attracts the manini fish (convict tang, *Acanthurus sandvicensis*). Top stones are lifted at low tide to reveal the manini inside the fish house. Women gather the manini by hand.

There are certain named reef patches in the ʻAhaʻino area known to kamaʻāina living on ancestral lands in that ahupuaʻa. The names of the individual reef patches in ʻAhaʻino

correspond with the names of women who lived during the time of the Māhele or even pre-contact times. People who claim ʻAhaʻino as part of their ancestral lands are able to trace their genealogy to these individual reef patches that served as personal ocean gardens.

It is unclear whether ʻohana from ancient times planted coral patches like those found in ʻAhaʻino. However, as mentioned above, the observation made by coral reef scientist Dr. Jim Maragos of the lane of coral connected to the mākāhā of a fishpond in ʻAhaʻino and extending outward (seaward) from the kuapā, likely indicates intentional coral plantings by ancient Hawaiians. Practices on other islands may also support this premise. For example, it is known that in Kahaluʻu Bay on Hawaiʻi Island, fishermen "pruned" reef for two purposes: to lessen breakage of nets on the reef and to create more niches for fish and other marine life to assemble and multiply.[299]

The ecology of the reef is changing drastically as corals are continuously choked by re-suspended sediment and new silt deposits from heavy rains carrying exposed topsoil down the mountain. Like the adaptations that the kiaʻi loko (fishpond caretakers) have employed at Keawanui fishpond, these Hawaiian practices of constructing fish houses and taking kuleana to mālama specific reef patches may be the best way to protect and restore abundance in Manaʻe fisheries.

According to one kamaʻāina, the strategic placement of fishponds around coastal springs was not only for the purpose of creating a micro-ecosystem for choice herbivorous fish that feed on limu and thrive in brackishwater. The kūpuna erected kuapā (rock wall) around these coastal springs to form a protective buffer between the natural surf, storm surge, and currents that could otherwise plug these springs with sand particles and rocks.

There is merit in his words, as there is an oral history account of the late kupuna, Aunty Zelie Sherwood of Manaʻe who spoke about the legendary spring Loʻipūnāwai located within ʻUalapuʻe fishpond. It was a critical source of water for the hoaʻāina there who were under the oppressive rule of an Oʻahu chief. The hoaʻāina survived by secretly gathering water from the coastal spring hidden in the center of ʻUalapuʻe fishpond, while they caused their oppressors to perish by poisoning all the visible waters.[300]

A less than common understanding is that what is cared for makai also impacts mauka. We learned this concept from Russell Kallstrom with The Nature Conservancy when he described the ongoing studies of native seabirds nesting at Moʻomomi on Molokaʻi's northwest coastline.[301] Moʻomomi is a community-based subsistence fishery managed for over twenty years by Uncle Mac Poepoe, a Hawaiian homesteader and konohiki of that area. Through the use of the Hawaiian moon calendar and mental models, Uncle Mac tracks feeding patterns, reproduction and life cycles, regeneration, multi-species interactions, and habitat requirements of Moʻomomi's marine life. According to Kallstrom, indigenous fisheries management has not only increased the health of the fishery, but has yielded corresponding positive results "upstream" as seen in the significant increase in fecundity, biomass, and survival rates of native seabirds and their offspring that nest along the coastal sand dunes of Moʻomomi. Bird feces in turn provide valuable nutrients to the land and marine algal beds.[302]

Manaʻe kamaʻāina have made similar observations of a positive feedback loop mauka-a-makai (mountain-to-sea) and makai-a-mauka (sea-to-mountain). Some examples include:

- Making hoʻokupu (offerings) of ʻopihi, fish, and shellfish at koʻa (fishing shrines). These hoʻokupu add nutrients from the sea to the soil while at the same time assist lawaiʻa (fishers) in finding family fishing grounds at sea. These practices also acknowledge the spiritual and genealogical connections between land and sea species as described in the Kumulipo.
- Erecting loko kuapā (walled fishponds) around important springs preserves water sources that feed fish, crab, and limu beds as well as provides an important emergency water source for people.

4.6.4. Is Subsistence Hunting a Traditional and Customary Hawaiian Practice and Right?

The manaʻo shared by Manaʻe kamaʻāina provide a compelling view of enduring Hawaiian customary practices exercised throughout the ahupuaʻa, both on land and in the ocean. They also demonstrate a richness in mālama ʻāina traditions that persist today. Scientific studies also corroborate what kamaʻāina are witnessing on the ground in terms of impacts to native forests, streams, fishponds, and reefs with the advent of hooved animals. Kamaʻāina interviews show that the degraded conditions of Manaʻe ahupuaʻa also impact traditional subsistence, gathering, fishing, and religious and ceremonial practices.

However grim the accounts are of the decline in resources and ahupuaʻa health, many of the same kamaʻāina attest to the importance of subsistence hunting to meet their family needs. Many of these kamaʻāina are hunters, fishers, gatherers, and farmers. It is more rare to find that one kamaʻāina is skilled in only one of these subsistence activities. If that is the case, then more often than not, other family members are filling the gaps with their own specialized skills (e.g., grandparents pick limu and do lāʻau lapaʻau (Hawaiian medicinal healing); father and son are hunters and fishermen; mother and daughter prepare Hawaiian foods like ʻinamona, raw crab, and gather articles in the forest for lei making).

The 1993 Molokaʻi Subsistence Study indicates from a random phone survey that twenty-five percent of the respondents hunted and on average they hunted seventeen days within a one-year period from July 1992 to June 1993.[303] These figures underscore the importance of wild game in the diets of Molokai families.

Thus this sub-section will provide a legal analysis of whether hunting of introduced animals constitutes a traditional and customary Hawaiian right. If hunting is indeed a Hawaiian custom protected under the law, then the next question will be whether there is room for all traditional and customary practices identified by Manaʻe kamaʻāina. Are these practices mutually exclusive or can they co-exist as equally important? If these rights and practices can be reconciled, then what is an achievable middle-ground that will restore the ahupuaʻa and maintain ungulate populations for subsistence hunting?

The State agency lead for the East Molokai Slope Watershed Management Plan is the Department of Land and Natural Resources (DLNR). As such, DLNR is obligated under Article XII, Section 7 of the Hawaiʻi State Constitution to "protect all [Native Hawaiian hoaʻāina] rights,

customarily and traditionally exercised for subsistence, cultural and religious purposes."[304] It also has the authority to regulate these rights to the extent feasible.[305]

The sources of Native Hawaiian rights law are described above in Section 4.2. H.R.S., § 7-1, an adoption of the Hawaiian Kingdom's Kuleana Act (1851), ensures that hoa'āina (native ahupua'a tenants) have access and gathering rights to meet their basic daily needs. The law recognizes hoa'āina "right[s] to take firewood, house-timber, aho cord, thatch, or ki leaf ... [and] a right to drinking water, and running water, and the right of way. ..." [306]

Hawai'i Revised Statutes, Section 1-1 instructs Hawai'i's courts to look to English and American common law decisions for guidance, except where they conflict with "Hawaiian judicial precedent, or … Hawaiian [custom and] usage."[307] H.R.S. § 1-1 recognizes certain customary practices that go beyond the rights specifically enumerated in H.R.S. § 7-1.[308]

The threshold question is whether hunting is a traditional and customary right. The *PASH* case is instructive for determining whether a particular practice qualifies as a Hawaiian custom. The criteria for proof of custom is that it be *consistent*, *certain*, and *reasonable*. The Hawai'i Supreme Court defines these terms as follows:

> (1) "consistency" is properly measured against other customs, not the spirit of the present laws; (2) a particular custom is "certain" if it is objectively defined and applied; certainty is not subjectively determined; and (3) "reasonableness" concerns the manner in which an otherwise valid customary right is exercised—in other words, even if an acceptable rationale cannot be assigned, the custom is still recognized as long as there is no "good legal reason" against it.[309]

Additionally, a custom need not be exercised since "time immemorial," but merely predate November 25, 1892 when the original Kingdom law was passed to guide judicial decisions.[310]

How can we determine whether hunting is *consistent*, *certain*, and *reasonable*? As explained in Section 4.2. above, courts look to kama'āina testimony as the standard for authenticating Hawaiian custom and usage.[311]

Kama'āina began with references to the Kamapua'a traditions. As was mentioned above, the Polynesian voyagers brought the pua'a (pig) with them when they settled in Hawai'i. The pua'a remains a strong part of the Hawaiian culture today. The deification of Kamapua'a as the pig-god reflects the strong cultural connection Hawaiians have to pua'a. The pua'a is not just a food source but has been elevated in mo'olelo (stories) as the adventurous and kolohe (mischievous) demigod Kamapua'a.[312]

Dr. Davianna Pōmaika'i McGregor offered some unique perspectives on Kamapua'a and whether hunting is a customary practice in the Kamakou Preserve Cultural Assessment she authored. Dr. McGregor shares the opinion of C.M. Kaliko Baker, a Hawaiian language instructor well-versed in the mo'olelo of Kamapua'a:

> Kamapuaʻa was free to roam, he was not domesticated. When he did damage and violated his neighbor's property and possessions they retaliated by trying to hunt and kill him. In his antagonistic relationship with the family of Pele deities his role was to break up the lava domain of Pele and convert it into forest. In the final resolution of their hostilities, Pele and Kamapuaʻa divided the island of Hawaiʻi into their respective domains, the forested areas being the domain of Kamapuaʻa. Hawaiian hunters have interpreted this as evidence that the pig has a natural role in the forest. In the end of the Kamapuaʻa saga, he ventures to Kahiki where his father-in-law castrates him in order to force him to settle into domestic life with a wife and child. According to Baker, this is an indication that the natural state of the pig was to roam free in the forest and that domestication was an imposition of civilization. Moreover the domestication of Kamapuaʻa occurred outside of Hawaiʻi. Baker also notes that pigs were hunted, using spears and/or prayers to be offered as hoʻokupu.[313]

When the Kamapuaʻa lore was discussed among Manaʻe kamaʻāina, there were some interesting viewpoints. One kamaʻāina who is a hunter but most vehemently expressed his disappointment with the disrespectful hunting behavior of youth who tend to hunt for trophies and are wasteful with animal meat stated, "There is no Kamapuaʻa tradition on Molokaʻi! When Kamapuaʻa arrived on Molokaʻi he was confronted by two moʻo wahine (lizard protectors) and they chased him off the island!"

Another kamaʻāina who expressed a reverence for Wao Nahele and Wao Akua and gathers in the upland forests for lei-making countered Baker's opinion by reflecting on Kamapuaʻa's latter years when he was less spry and mischievous. He admonished the people to mālama the forest. For this reason, she does not agree that the Kamapuaʻa tradition suggests that hunting is a customary right that should dilute the more important kuleana and custom of mālama. For her, feral pigs and other ungulates do not belong in the forest and so a co-existence of hooved animals and native forest is untenable. For her, mālama can and should entail fencing at least the remaining upper native forest. She feels that if any hunters who might be opposed to erecting a fence at all and who might claim that their rights are superior to other traditional and customary Hawaiian practices are selfish and should not be afforded any protections or concessions.

Dr. McGregor points out that the Polynesian puaʻa introduced to Hawaiʻi was domesticated and rarely wandered beyond the Wao Kanaka.[314]

> The uppermost levels of the rainforest were sacred to the gods and acknowledged as the Wao Akua. Humans rarely ventured into this realm. The harvesting of plants or even trees from this realm required hoʻokupu or the offering of sacrifices to the deities. The pigs rarely roamed into this sector of the forest.[315]

This would suggest that in protecting the Wao Akua, as is proposed in the East Slope Watershed Plan, the EMoWP would not need to make accommodations (e.g., via step-overs) for hunters to enter through the fenceline to hunt.

However, Dr. McGregor observes that development over the last two centuries has pushed the pigs and other ungulates higher up the mountain into Wao Akua.[316] She cites also the abolition

of the kapu system, the conversion of Native Hawaiians to Christianity, and other foreign influences that corroded Hawaiian precepts on the sacredness of Wao Akua and opened the way for humans and feral animals to infiltrate this region[317]:

> Since agriculture and residential development has destroyed the lowland forest areas where the pigs used to be plentiful and easily reached on foot trails Hawaiians must go deeper into the same forests or higher up the same mountain hunted by their ancestors.[318]

This suggests that Hawaiian customs have had to adapt to changing times. The *PASH* court made clear that customs need not have originated from "time immemorial" and practiced continuously onward to present day. Rather, the custom must have been adopted prior to 1892.[319]

It is well-established that the pua'a arrived with the first Polynesian migration to Hawai'i in the 4th century A.D. It is also well known that Europeans brought a larger variety of pig in the 18th century with the arrival of Captain Cook. The interbreeding of these two species produced the feral pig known to roam Hawai'i's forests today. Pig hunting methods today have been directly influenced by European practices that have been passed down through the generations over the last 150 years. This involves the use of "dogs [to] locate, chase, grab, or bay the game, which is then typically dispatched by the hunter with a gun or knife."[320]

Similarly, axis deer and goat introductions pre-date 1892. Like pig, they have become important food sources for Moloka'i kama'āina. These animals are typically hunted with use of rifles. Some also use bow and arrow, but that appears to be a recent and rare method of hunting on Moloka'i.

The use of guns, knives, bow and arrow, etc. in hunting should not detract from whether or not a particular practice like hunting is customary or not. As McGregor points out with the Hawaiian 'ohana values, it is the essence of the practice itself that relates to subsistence, culture, and religious ceremony that matter most.[321] The pono hunting approach shared by several of the elder kama'āina hunters reflect this mindset of mālama: being mindful when hunting to respect the resources and gauge their health; to only take what is needed to feed the family; to not waste meat and to bury the entrails respectfully. This approach reflects the essence of Hawaiian practice.

In the recent *State v. Palama* opinion issued by the Hawai'i Intermediate Court of Appeals, the court affirmed the trial court's dismissal of criminal charges against a Native Hawaiian defendant who was arrested for pig hunting on private property in Kaua'i.[322] Palama is a hoa'āina of Hanapepe and cares for his kuleana land and taro patch there. He often traverses the ahupua'a and across privately owned lands in Hanapepe to inspect the river flow and water quality for his kalo, as well as hunt for pig to feed his family. One day, Palama went pig hunting with a mule and his dogs. He successfully killed a wild pig with his knife and was subsequently arrested for trespass and for hunting on private lands.

The court applied the *Hanapi* three-part test that a criminal defendant must meet to assert a constitutionally protected native Hawaiian right. Namely, the defendant must prove that he is a descendant of "native Hawaiians who inhabited the islands prior to 1778";[323] second, that his

"claimed right is constitutionally protected as a customary or traditional native Hawaiian practice";[324] and third, "that the exercise of the right occurred on undeveloped or 'less than fully developed property.'"[325]

Palama easily met the first part of the test: proof of native Hawaiian descent. The land on which he hunted also fit the definition of undeveloped or less than fully developed property.

With respect to the second-part of the test, the court sought to determine under *Hanapi* whether there was "an adequate foundation in the record connecting the claimed right to a firmly rooted traditional or customary native Hawaiian practice."[326] The court referenced the Hawaiian custom and usage statute, H.R.S., § 1-1, to determine under the circumstances of this case, whether Palama's pig hunting on the subject property constituted a traditional and customary right.

Palama testified that he had been hunting pig since he was a child and that this knowledge was passed down to him by his family. The court received expert testimony from Dr. Jon Osorio, a Professor of Hawaiian Studies. He explained that pigs were an important part of the subsistence diet of ancient Hawaiians prior to 1892; that pigs were hunted as a method to keep the feral pig population down and deter pigs from destroying ʻuala (sweet potato) and loʻi kalo (taro patches). Dr. Osorio believed that Palama was continuing this tradition of "hunting to supplement the diet of his family, and that he was doing it the same way that his father before him and ancestors before him had done."[327] It was also noted that Palama was pig hunting in the area surrounding his taro patch. Another native pig hunter from the same area offered kamaʻāina expert testimony. He testified that native Hawaiian hunters, including Palama's ʻohana, have been hunting on the subject private property for successive generations.

Based on the evidence offered, the appeals court agreed with the trial court that pig hunting constitutes a traditional and customary Hawaiian right. The court also agreed that the Defendant's constitutionally protected hunting privilege was reasonably exercised. The court found substantial evidence in the record that Palama hunted in a reasonable manner, in alignment with cultural subsistence values and with a mindset for traditional conservation in that he protected his taro patch by hunting pig in the surrounding area.

Given the *Palama* opinion, it is more than likely that the State would uphold pig hunting by Manaʻe kamaʻāina as a valid and constitutionally protectable traditional and customary Hawaiian right, so long as they hunt in a reasonable manner that does not infringe on the rights of others. The same legal framework could also apply to subsistence hunting of deer and goat.

4.6.5. Can Potentially Conflicting Native Hawaiian Practices Coexist? Can these Rights be Reconciled?

With hunting as a traditional and customary Hawaiian right, how can it be reconciled with other traditional and customary rights and practices that may be adversely affected by hunting?

It might all be a matter of perspective. One kamaʻāina informant shared that when asked what his purpose is, the appropriate response would be to take care of Hina. For him, that means the

use of conservation fencing. To the kamaʻāina who looks at any fence as a "Keep Out, No Trespass" sign and an infringement on his hunting rights, perhaps he might look at the conservation fence in a different way. The incremental step-overs for access are both an assurance that he may continue to hunt and that private landowners will no longer stop him from doing so. At the same time, the natural resources protected within the fence will remain vibrant and abundant so that the other cultural practices he exercises can be maintained today and for succeeding generations of his family.

Reconciling potential conflicts requires finding some kind of common ground. Prevalent in every kamaʻāina interview we conducted was a profound love for ʻāina, and more specifically for Molokaʻi as "one hānau" (birth place). This deep-seated aloha for island and place evoked many passionate statements from kamaʻāina on how to mālama ʻāina and how to mālama each other when there is disagreement. Not a single interviewee reflected a one-sided approach based on rights and privileges, absent responsibility to mālama ʻāina. All could readily agree with the sentiment that the ʻāina, while it is our ice box, still needs fixing.

Earlier Hawaiians had to grapple with potentially conflicting uses. Konohiki were put in charge to carefully regulate uses, so resources would not be over-used or depleted. This is why the kapu system was established – to monitor the people's activities and their use of the resources. Similarly, we must balance the need for an intact forest, the need for hunters to access certain areas to procure game, and the need for lāʻau lapaʻau practitioners, lei makers, fishers, and limu gatherers to enjoy thriving resources.

Ka poʻe kahiko, the people of ancient times, were subject to a stringent kapu system. The kapu system regulated what types of foods men and women could consume.[328] It provided the protocols of engagement between makaʻāinana and esteemed aliʻi.[329] Kapu were also placed on certain activities, such as when to make war and when to honor peace.[330] Finally, the kapu system served as a set of conservation measures.

For example, water use was regulated through a complex set of kānāwai (laws). This entailed the fair allocation of water and honoring time slots among mahiaʻi (farmers) for opening and closing ʻauwai (irrigation ditches) leading from the main stream to a vast network of loʻi kalo (taro patches). Konohiki or lunawai (water managers) enforced the kānāwai and exacted capital punishment on those who disobeyed the law.[331]

Similarly, kapu were also integrated into fisheries management and conservation. Konohiki oversaw the fishing activities within each ahupuaʻa. They ordered the people to alternate fishing areas to avoid depletion and allow for replenishment. They also issued species-specific kapu to correspond with fish spawning periods.[332] According to respected Hawaiian historian, Mary Kawena Pukui, the kapu system in the Kāʻū district of Hawaiʻi Island was practiced in the following manner:

> When inshore fishing was tabu (kapu), deep sea fishing (lawaiʻa-o-kai-uli) was permitted, and vice versa. Summer was the time when the fish were most abundant and therefore the permitted time for inshore fishing. Salt was gathered at this time, also, and large quantities of fish were dried … In winter, deep sea fishing was permitted. A tabu for the

> inshore fishing covered also all the growths in that area, the seaweeds, and shellfish, as well as the fish. When the kahuna had examined the inshore area, and noted the condition of the animal and plant growths, and decided that they were ready for use, that is, that the new growth had had a chance to mature and become established, he so reported to the chief of the area, and the chief ended the tabu. For several days it remained the right of the chief to have all the sea foods that were gathered, according to his orders, reserved for his use, and that of his household and retinue. After this, a lesser number of days were the privilege of the konohiki (overseers of lands under the aliʻi). Following this period the area was declared open (noa) to the use of all.[333]

At the end of a fishing expedition, the lawaiʻa would make an offering of the first catch before the altar of Kūʻula; prized catch were set aside for the aliʻi and his household; then apportionment to the kahuna and konohiki; and finally among the fishermen and those who were in need.[334] As Titcomb describes,

> Division was made according to need, rather than as reward or payment for share in the work of fishing. Thus all were cared for. Anyone assisting in any way had a right to a share. Anyone who came up to the pile of fish and took some, if it were only a child, was not deprived of what he took, even if he had no right to it. It was thought displeasing to the gods to demand the return of fish taken without the right.[335]

The practice of sharing catch is still prevalent among the people of Molokaʻi and is practiced by many Manaʻe kamaʻāina. It is very common especially for fishermen to share catch; hunters to share venison, smoked pig, and goat jerky; farmers and gardeners to share fruits and vegetables with extended ʻohana, neighbors, and especially kupuna who are no longer able to holoholo and easily provide for themselves.

Aliʻi were not immune from societal expectations related to sharing. For instance, while the catch belonged to the aliʻi when fishing was done by or for him, the aliʻi was obligated to share generously with the people.[336]

Dr. Lilikalā Kameʻeleihiwa explains that the source of reciprocity and interdependence between aliʻi and makaʻāinana is embedded within the obligation to mālama ʻāina. Aliʻi were charged with providing the leadership and organization to make the land bountiful and, in turn, capable of sustaining a growing population. The makaʻāinana through their labor fed and clothed the aliʻi. If a commoner failed in his kuleana to mālama the portion of ʻāina allotted to him, he was dismissed. If a konohiki failed in his leadership and management of the resources, he was also discharged of his duties. If the land suffered and the people starved, it was perceived as the fault of the aliʻi for displeasing the gods and not following religious protocols. Negligence in mālama ʻāina signaled also a breakdown in the relationship between aliʻi and makaʻāinana.[337]

Chapter 5 covers the kamaʻāina recommendations to the tough questions we asked:

- If you were konohiki, what would you do?
- Even if you support the fencing initiative in your ahupuaʻa, how would you mālama neighboring ahupuaʻa who are presently not included in the watershed partnership?

- How would you prevent ungulates from migrating to Waialua, Honouliwai, and Honoulimaloʻo and fouling the streams there if everywhere else was fenced?
- If it is not feasible to lower the fenceline to the former lowland forest, how can we repair the damage done by ungulates? How can we re-plant?
- How would you organize community hunts?
- How would you respond to private landowner concerns regarding liability? How would you mend soured relationships between hunters and large landowners?
- How do you address eroding cultural understandings and diverging values between elder hunters and young hunters? How can you give young hunters an ethic of conservation, mālama and aloha ʻāina?

The answers are quite innovative and inspiring.

4.6.6. Finding a Middle Ground: Revisiting Article XII, Section 7 in Balancing the State's Constitutional Mandate to Affirmatively Protect Native Hawaiian Rights to the Extent Feasible with its Authority to Reasonably Regulate these Rights

Under Article XII, Section 7 of the Hawaiʻi State Constitution, government must protect Native Hawaiian rights, but may reasonably regulate them to the extent feasible.[338] However, this provision does not give the State "the unfettered discretion to regulate the rights of ahupuaʻa tenants out of existence."[339] Additionally Article XII, Section 7 of the Constitution "places an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights, and confers upon the State and its agencies 'the power to protect these rights and to prevent any interference with the exercise of these rights.'"[340]

In criminal cases where the constitutional privilege of exercising a valid Native Hawaiian right succeeds under the three-prong *Hanapi* test, an additional requirement is a "balancing test" that requires the court to "look to the totality of the circumstances and balance the State's interest in regulating the activity against the defendant's interests in conducting the traditional or customary practice."[341]

In *Palama,* the State successfully requested judicial notice be taken of the DLNR Game Mammal Hunting Regulations, Hawaii Administrative Rules (HAR), Title 13, Chapter 123 specifically for the island of Kauaʻi which informs hunters of public hunting grounds where pig hunting is allowed. In doing so, it challenged the trial court's finding that this regulation served as a "blanket prohibition or extinguishment of [Palama's] protected [Hawaiian] practice."[342] The State reasoned that Palama could easily have acquired permission from the landowner or obtained a hunting license to hunt on public lands as provided for by State regulations.

Palama argued that the State's implementation of H.R.S., § 183D-26 would impermissibly delegate to private landowners "the absolute power to grant or deny Native Hawaiians their constitutional privileges."[343] The trial court also found the State's rationale to be flawed. Focusing specifically on whether the State's enforcement of the regulation infringed on Palama's

right to hunt on the subject private property in Hanapepe ahupua‘a (where he is a hoa‘āina), the appeals court ruled that this action would “operate[ ] as a summary extinguishment of Palama’s constitutionally protected right to hunt pig on the subject property.”[344]

The ICA reiterated the Hawai‘i Supreme Court’s position in *PASH* that western understandings of property law are not synonymous with Hawai‘i’s system; namely, “the western concept of exclusivity is not universally applicable” here.[345] Further, the appeals court looked to the legislative record to determine the consititutional framers’ intentions in adopting Article XII, § 7:

> Aware and concerned about past and present actions by private landowners ... which preclude native Hawaiians from following subsistence practices traditionally used by their ancestors, your Committee proposed this new section to provide the State with the power to protect these rights and to prevent any interference with the exercise of these rights. Moreover, your Committee decided to provide language which gives the State the power to regulate these rights. ...[346]

Delegates of the 1978 convention communicated the importance of this constitutional amendment, given that “large landowners, who basically are 10 to 12 corporations and estates and who own almost 90 percent of all private lands, have intruded upon, interfered with and refused to recognized [sic] such rights.”[347] The court factored these committee findings into its analysis in *Palama* and concluded that requiring Palama to gain landowner permission to utilize lands that he traditionally and customarily accesses for hunting or in the alternative hunting on public land “frustrates the protections afforded by HRS § 1-1 and 7-1 and article XII, section 7.”[348]

The *Palama* case was decided within a criminal trespass context and places the burden on the Native Hawaiian defendant to prove s/he was practicing a constitutionally protected traditional and customary Hawaiian right. The more appropriate standard of review for this watershed partnership is to look especially at the State’s constitutionally mandated public trust obligations – to care for natural ecosystems, as well as to preserve Native Hawaiian rights and practices that rely on healthy resources and ecosystems.

Reviewing the *Palama* case is still instructive, however, in determining the delicate balance the State must exercise to affirmatively protect Native Hawaiian rights, while at the same time reasonably exercise its regulatory powers. *Palama* is also instructive regarding the State’s role in facilitating and fostering productive and respectful relationships between Native Hawaiian cultural practitioners, large private landowners, and conservation groups.

In a civil context where certain proposed actions may impact Native Hawaiian rights, the burden sits squarely with the applicant to prove there is no infringement on those rights. Here, the EMoWP involves the State as a lead and partner. Per the *Ka Pa‘akai* standard, the State must make an independent assessment of what cultural practices exist in the subject area, determine the potential cultural impacts, and adopt a plan that mitigates those impacts. It is also necessary that the State affirmatively protect Native Hawaiian rights, which are also considered public trust purposes under the State constitution.

The EMoWP proposal and this Manaʻe Traditional and Customary Practices Report are a combined exercise in collaborative governance between State government, private, and native Hawaiian stakeholders. This collaboration is also a positive step toward meeting constitutional obligations to protect traditional and customary Hawaiian rights and the public trust.

The EMoWP has a complex challenge as well as an incredible opportunity to achieve synergy – whole-scale solutions that are greater than the sum of the individual parts. It can attain this through collaborating with the Native Hawaiian community; melding conventional conservation strategies with indigenous, ecological knowledge; and considering the deeper and very positive implications of what Hawaiians mean by laulima (working together), mālama (stewardship), and pono (doing things the right way, even when it is more difficult at the outset).

4.7. THE VALUE OF INTEGRATING TRADITIONAL ECOLOGICAL KNOWLEDGE IN NATURAL RESOURCE MANAGEMENT

By studying clues in the landscape, scientists have begun to realize that what they believed to be pristine ecosystems, were in fact sophisticated and biodiverse environments that were sustainably designed by indigenous peoples over hundreds of years. There is a new appreciation for indigenous resource management strategies based on traditional ecological knowledge (TEK)[349] because of the solutions that they may offer in these modern times.[350] According to a report titled, "Our Common Future" from the World Commission on the Environment and Development (WCED), "Tribal and indigenous peoples' … lifestyles can offer modern societies many lessons in the management of resources …[they] are repositories of vast accumulations of traditional knowledge and experience that link humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems."[351]

The waiwai (richness) found in the Manaʻe kamaʻāina interviews underscore the importance of traditional knowledge in paving a sustainable path forward.

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[43] *A Mau A Mau*, *supra* note 1.
[44] Report to the Twenty-Fifth Legislature 2009 Regular Session: Final Report Aha Kiole Advisory Comm. at 7 (2008), *available at http://www.ahamoku.org/wp-content/uploads/2011/09/Final-Report-12-18-081.pdf* [hereinafter Aha Kiole Legislative Report 2009] (quoting Act 212, 2007 Leg., 24th Sess. (Haw. 2007)).
[45] HAW. REV. STAT. §171-4.5(d) (2013) (emphasis added).
[46] *A Mau A Mau*, *supra* note 1.
[47] *Id.*
[48] Interview with Dr. Kawika Winter, Director, Limahuli Garden and Pres., Hāʻena Makai Watch Coordinator, and former member of the late Kumu John Kaʻimikaua's Halau Hula o Kukunaokalā in Honolulu, Haw. (Dec. 10, 2014) [hereinafter Dr. Kawika Winter Interview].
[49] *Id.*
[50] Dr. Kawika Winter, *Applying Traditional Resource Mgmt. Philosophies to Contemporary Conservation Efforts on Kauaʻi*, Presentation to the Native Hawaiian Rights Clinic, Univ. of Haw. William S. Richardson Sch. of Law (Nov. 9, 2015) [hereinafter Dr. Kawika Winter Presentation].
[51] *A Mau A Mau*, *supra* note 1.
[52] *Id.*

[53] *Id.*
[54] *Ahupua'a*, MARY KAWENA PUKUI & SAMUEL H. ELBERT, HAWAIIAN DICTIONARY 9 (rev. & enlarged ed. 1986) ("[L]and division usually extending from the uplands to the sea, so called because the boundary was marked by a heap (ahu) of stones surmounted by an image of a pig (pua'a), or because a pig or other tribute was laid on the alter a tax to the chief.").
[55] CARLOS ANDRADE, HĀ'ENA THROUGH THE EYES OF THE ANCESTORS, 27 (2008) (describing Kaua'i Island's "Golden Age" when its reigning ali'i Manokalanipo "initiat[ed] a system of classifying and organizing lands into different categories in order to better manage resources and people" and through this system, "peace and prosperity" resulted). *See also* KAMANAMAIKALANI BEAMER, NO MĀKOU KA MANA: LIBERATING THE NATION, 32-33 (2014) (describing land identified and bound by palena allowed for resource governance and management that ensured greater productivity).
[56] *A Mau A Mau*, *supra* note 1.
[57] Aha Kiole Legislative Report 2009, *supra* note 44 at 38.
[58] ANDRADE, *supra* note 55 (the term "kona" typically refers to lands along that are south or southwest facing on each of the Hawaiian islands.).
[59] *Id.* (The term "ko'olau" refers to lands that are typically situated on the windward side of each island, the lands buffeted by the pre-dominant northeasterly winds of Hawai'i.).
[60] BEAMER, *supra* note 55, at 31.
[61] *Id.* at 45-47.
[62] Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupua'a in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawai'i.* 48 HAW'N J. HIST. 53, 56 (2014) (land boundaries were known by maka'āinana mentally and their knowledge was passed down orally. The concept of physically drawing maps came post-European contact. While certain famous mō'ī from various islands are credited for demarcating moku and ahupua'a, it is noted that some ahupua'a pre-dating the "centraliz[ed] ali'i" system are more likely that similar "kin-based land units" of older "non-feudally organized Polynesian islands."). *See also* BEAMER, *supra* note 55, at 32-33 (the palena created "spaces of attachment and access . . . [they] delineated the resource access of maka'āinana and ali'i on the ground, literally connecting people to the material and spiritual resources of these places." The knowledge of these palena known "visually and cognitively" by hoa'āina was shared orally from one generation to the next).
[63] BEAMER, *supra* note 55, at 47.
[64] Gonschor & Beamer, *supra* note 62, at 55 ("[T]he system of ahupua'a divisions was created by rulers who unified or centralized governance of their respective islands, such as Mā'ilikukahi on O'ahu and 'Umi on Hawai'i Island."). *See also* ANDRADE, *supra* note 55, at 27 (explaining that Manokalanipo was part of Kaua'i Island's "Golden Age" of agricultural productivity, also creating a framework of land classification along moku and ahupua'a).
[65] BEAMER, *supra* note 55, at 34-35 (Mā'ilikūkahi is the famed mō'ī of O'ahu who is known as the first to establish palena (boundaries and divisions) of moku and ahupua'a in a manner that made the land productive. These palena are noted to this day in land titles and maps).
[66] E.S. CRAIGHILL HANDY & MARY KAWENA PUKUI, THE POLYNESIAN FAMILY SYSTEM IN KA'U, HAWAI'I 5 (1998).
[67] *Id.*
[68] ANDRADE, *supra* note 55, at 30, 74.
[69] BEAMER, *supra* note 55, at 45 (noting that while "all lands were redistributed [by the new, reigning, successive mō'ī to his loyal chiefs], the rights over those lands would change to a lesser extent for maka'āinana families who continued to live on their lands with similar rights throughout multiple kālai'āina, while the rights of individual chiefs and mō'ī could change with each kālai'āina.").
[70] HANDY & PUKUI, *supra* note 66 (describing 'ohana in her native homeland district of Kā'ū on Hawai'i Island, "[t]he fundamental unit in the social organization of the Hawaiians of Ka-u was the dispersed community of 'ohana, or relatives by blood, marriage and adoption, living some inland and some near the sea but concentrated geographically in and tied by ancestry, birth and sentiment to a particular locality which was termed the 'āina [sic].").
[71] HANDY & PUKUI, *supra* note 66 (describing that over time, through inter-marriage among families, the presence of extended 'ohana became established throughout the ahupua'a and nearby moku).
[72] *Id.* at 4.
[73] *Id.*
[74] BEAMER, *supra* note 55, at 43.

[75] HANDY & PUKUI, *supra* note 66, at 4.
[76] *Id.*
[77] BEAMER, *supra* note 55, at 44.
[78] Gonschor & Beamer, *supra* note 62, at 55 (describing makahiki as a time of peace, celebrated annually during the period of the god Lono-i-ka-makahiki. At each ahupuaʻa boundary, ahu (altars) were erected with a puaʻa (pig) and other tributes for the ruling aliʻi placed atop it. Hoʻokupu (offerings) were also given to ensure ʻāina momona (abundance) and blessings upon the land).
[79] HANDY & PUKUI, *supra* note 66, at 5-6 (describing the important role extended ʻohana played in making the land productive, establishing sharing networks, and providing local leadership in every day ahupuaʻa affairs).
[80] *Id.* at 6.
[81] *Id.*
[82] *A Mau A Mau*, *supra* note 1.
[83] *Id.*
[84] *Id.*
[85] Dr. Kamanamaikalani Beamer, presentation to HWST 458 Nat. Resource Issues & Ethics in Haw. class, Univ. of Haw. at Mānoa Lecture (Feb. 5, 2015) [*hereinafter* Dr. Kamana Beamer Presentation] (explaining that under one rule, the mōʻī and ʻaha aliʻi represented top-down governance that was necessary to govern the larger affairs of an island. The kupaʻāina, the common people familiar with their land, maintained the palena, their place-based knowledge of the uses and boundaries of their ahupuaʻa).
[86] LILIKALĀ KAMEʻELEIHIWA, NATIVE LANDS & FOREIGN DESIRES: PEHEA LĀ E PONO AI?, 26 (1992) ("the *Aliʻi Nui* kept the *ʻĀina* fertile and the *Akua* appeased; the *makaʻainana* fed and clothed the *Aliʻi Nu*i. The *Aliʻi Nu*i determined the correct uses of the *ʻĀina*. The *pono,* or righteous *Aliʻi Nui*, was one who established order upon the ʻ*Āina* so that it might be more productive.").
[87] *Id.* at 24.
[88] *Id.* at 26.
[89] Marion Kelly, Changes in Land Tenure in Hawaii, 1778-1850 (June 1956) (unpublished thesis, University of Hawaiʻi at Mānoa) (on file with author).
[90] HAWAIʻI ASSOCIATION OF WATERSHED PARTNERSHIPS, http://hawp.org/what-is-a-watershed (last visited Jan. 29, 2015).
[91] E.S. CRAIGHILL HANDY & ELIZABETH GREEN HANDY WITH THE COLLABORATION OF MARY KAWENA PUKUI, NATIVE PLANTERS IN OLD HAWAII: THEIR LIFE, LORE, AND ENVIRONMENT 48 (rev. ed. 1991) [hereinafter HANDY, HANDY & PUKUI].
[92] Gonschor & Beamer, *supra* note 62, at 69 (citing Marion Kelly, Changes in Land Tenure in Hawaii, 1778-1850 (June 1956) (unpublished M.A. thesis, University of Hawaʻi)).
[93] Gonschor & Beamer, *supra* note 62, at 79. *See* also BEAMER, *supra* note 55, at 40-42.
[94] BEAMER, *supra* note 55, at 51.
[95] Gonschor & Beamer, *supra* note 62, at 70.
[96] *Id.* at 73.
[97] *Id.* at 70.
[98] *Id.* at 69-79.
[99] *Id.* at 69. *See* also BEAMER, supra note 55, at 52 ("On Lānaʻi and Molokaʻi, some ahupuaʻa extend across the island from a fishery up into the mountains and down to the adjacent fishery.").
[100] Gonschor & Beamer, *supra* note 62, at 69.
[101] *Id.* at 71.
[102] Dr. Kawika Winter Presentation, *supra* note 50.
[103] *Id.*
[104] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[105] Dr. Kawika Winter Presentation, *supra* note 50.
[106] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[107] Dr. Kawika Winter Presentation, *supra* note 50.
[108] *Id.*
[109] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[110] Dr. Kawika Winter Presentation, *supra* note 50.
[111] HANDY & PUKUI, *supra* note 66, at 4.

[112] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[113] Dr. Kawika Winter Presentation, *supra* note 50.
[114] HANDY & PUKUI, *supra* note 66, at 4.
[115] *Id.* at 6.
[116] *Id.*
[117] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[118] *Id.* at 57.
[119] *Id.* at 56-57.
[120] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21.
[121] MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, *supra* note 29, at 16-17.
[122] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 28–29 (noting that "[a]lthough the chiefs and the konohiki had full appropriation rights over the land and the people, in the main this was a system of mutual obligation and benefit between the chiefs and the people. The chiefs controlled the land and distributed it among the makaʻāinana. The chief was required to manage and oversee the production on the land. He regulated the use of scarce resources and apportioned these resources among the people according to principles of fair use … He conserved the resources of the land through restriction and replacement policies. Although Hawaiian tradition records cases of arbitrary, irresponsible, and self-serving chiefs who abused the people, they were clearly exceptional cases and were quickly replaced with responsible chiefs who cared for the well-being of the people. The Hawaiian proverb 'I aliʻi no aliʻi no nā kanaka' (a chief is a chief because of the people) reflects the Hawaiian attitude that the greatness of a chief was judged according to the welfare of the people under him. According to the Hawaiian historian David Malo, 'In former times, before Kamehameha, the chiefs who took great care of their people. That was their appropriate business, to seek the comfort and welfare of the people, for a chief was called great in proportion to the number of his people.'").
[123] *United Nations Declaration on the Rights of Indigenous Peoples*, G.A. Res. 61/295, U.N. Doc. A/RES/61/295 (Sept. 13, 2007), 46 I.L.M. 1013 (2007) [*hereinafter* UNDRIP].
[124] *Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples: Initiatives to Promote the Government-to-Government Relationship & Improve Lives of Indigenous Peoples* (available at http://www.state.gov/documents/organization/184099.pdf).
[125] Frank Seier, *'Free, Prior and Informed Consent' under UNDRIP: What Does it Really Mean?*, (Jun. 2011), http://www.right2respect.com/2011/06/'free-prior-and-informed-consent'-under-the-un-declaration-on-the-rights-of-indigenous-peoples-what-does-it-really-mean/ (last visited Jan. 28, 2015).
[126] UNDRIP, *supra* note 123.
[127] FOREST PEOPLES PROGRAMME, *Free, prior and informed consent (FPIC)*, http://www.forestpeoples.org/guiding-principles/free-prior-and-informed-consent-fpic (last visited Jan. 28, 2015).
[128] *Id.*
[129] HAW. REV. STAT. §171-4.5(d) (2013).
[130] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 30 (noting that Kamehameha I conquered the islands of Oʻahu, Molokaʻi, Maui, and Lānaʻi in 1795 after having his warriors train with Western military weapons).
[131] *Nā Kumukānāwai O Ka Makahiki 1839 A Me Ka 1840*, 1.1 KA HOʻOILINA: JOURNAL OF HAWAIIAN LANGUAGE SOURCES, Luna Hoʻoponopono et al., eds., Jason Kāpena Achiu trans., Mar. 2002 [hereinafter L.1840], at 30-59, *available at* http://hooilina.org/collect/journal/index/assoc/HASH0166.dir/1.pdf (last visited Feb. 17, 2015).
[132] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 32.
[133] L.1840, *supra* note 131; McBryde Sugar Co. v. Robinson, 54 Haw. 174, 185-87, 504 P.2d 1330, 1338-39 (1973)); *See also* Kekiekie v. Dennis, 1 Haw. 42, 43 (1851) (validating that the rights of hoaʻāina, native ahupuaʻa tenants, were guaranteed through the 1840 Constitution of the Hawaiian Kingdom).
[134] BEAMER, *supra* note 55, at 144.
[135] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawaiʻi 425, 447, 903 P.2d 1246, 1268 (1995) (concluding that the "western concept of exclusivity [in private property law] is not universally applicable in Hawaiʻi" and that "the issuance of [ ] Hawaiian land patent[s]" at the time of the Māhele conveyed "a limited property interest.").
[136] Gonschor & Beamer, *supra* note 62, at 58.
[137] *PASH*, 79 Hawaiʻi at 445 (citing *Law Creating the Bd. to Quiet Land Titles,* in Fundamental Laws of Hawaii 137 (1904)).

[138] *Id.* (citing Act of April 27, 1846, pt. I, ch. VII, art. IV, § 7; L. 1845–46, at 109, *reprinted in* 2 *Revised Laws of Hawaii* 2123 (1925)).
[139] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 34 (citing OFFICE OF THE COMM'R OF PUB. LANDS, INDICES OF AWARDS MADE BY THE BD. OF COMM'R TO QUIET LAND TITLES IN THE HAWAIIAN ISLANDS, at 2 (1929)).
[140] BLACK'S LAW DICTIONARY, 1564 (6th ed. 1990) (citing American States Water Serv. Co. of Cal. v. Johnson, 31 Cal.App.2d 606, 88 P.2d 770, 774).
[141] *Id.* (citing St. ex rel. Milligan v. Ritter's Estate, Ind. App., 46 N.E.2d 736, 743 (1943)).
[142] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 35.
[143] Gonschor & Beamer, *supra* note 62, at 59.
[144] *Id.* at 58.
[145] *Id.*
[146] *Id.* at 60-61.
[147] *In re* Boundaries of Pulehunui, 4 Haw. 239, 251 (1879).
[148] Gonschor & Beamer, *supra* note 62, at 61.
[149] DAVID M. FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU: A LEGAL PRIMER FOR TRADITIONAL AND CUSTOMARY RIGHTS IN HAWAIʻI 9 (2012) [hereinafter FORMAN & SERRANO, HOʻOHANA AKU, A HOʻOLA AKU].
[150] Gonschor & Beamer, *supra* note 62, at 61.
[151] Act of August 6, 1850, § 7, *reprinted in Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* 202, 203–04 (1850) [hereafter L. 1850].
[152] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 446, 903 P.2d 1246, 1267 (1995) (citing 3B *Privy Council Records* 681, 713 (1850)).
[153] *Id.* (citing L. 1851, § 7, at 98 regarding the "many difficulties and complaints have arisen from the bad feeling existing on account of the Konohiki's [sic] forbidding the tenants on the lands enjoying the benefits that have been by law given them.").
[154] Act of July 11, 1851, *reprinted in Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* 98–99 (1851) [hereafter L. 1851].
[155] Haw. Rev. Stat. § 7-1 (1994).
[156] L.1892, c. 57, s 5, approved on November 25, 1892 which states, "Section 5. The common law of England, as ascertained by English and American decisions, is hereby declared to be the common law of the Hawaiian Islands in all cases, except as otherwise expressly provided by the Hawaiian Constitution or laws, or fixed by Hawaiian judicial precedent, or established by Hawaiian national usage, provided however, that no person shall be subject to criminal proceedings except as provided by the Hawaiian laws."
[157] Haw. Rev. Stat. § 1-1 (2013); *See* FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 9-10.
[158] State v. Zimring, 52 Haw. 472, 475 (1970) (citing De Freitas v. Trustees of Campbell Estate, 46 Haw. 425, 380 P.2d 762 (1963)).
[159] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 437, 903 P.2d 1246, 1258 (1995) (note 21, citing 1 *Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* 3 (1845-46)).
[160] *Id.* (note 21, citing Act of September 7, 1847, ch. I, § IV; 2 *Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* (1847) (emphasis added)).
[161] *In re* Ashford, 50 Haw. 314, 440 P.2d 76 (1968).
[162] *Id.* at 316.
[163] HAW. CONST. art. XII, § 7 (1978) (emphasis added).
[164] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 437, 903 P.2d 1246, 1258, note 43 (1995).
[165] Kalipi v. Hawaiian Trust Co., 66 Haw. 1, 656 P.2d 745 (1982).
[166] FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 9 (citing Kalipi, 66 Haw. at 9, 656 P.2d at 750).
[167] *See PASH*, 79 Hawai'i at 451.
[168] Pele Def. Fund v. Paty (*Pele I*), 73 Haw. 578, 620, 837 P.2d 1247, 1272 (1992). *See* FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 13 (citing *Pele I*, 73 Haw. at 620, 837 P.2d at 1272). In *Pele I*, the plaintiffs, the Pele Defense Fund ("PDF") challenged the state's decision to exchange specific ceded lands for privately owned land on Hawai'i Island. PDF claimed that after the land swap, its Native Hawaiian

members seeking to exercise traditional subsistence, cultural, and religious practices were denied access to the undeveloped and now privately owned land. PDF provided testimony and affidavits attesting to the actual practices of Native Hawaiians living in in the Puna region as traditionally gathering outside of their ahupua'a of residence onto the lands subject in this litigation. This evidence formed the basis for the court's decision to affirm these practices as rights protected by law.

[169] FORMAN & SUSAN K. SERRANO, HO'OHANA AKU, A HO'OLA AKU, *supra* note 149, at 13-14 (citing *Pele I*, 73 Haw. at 620-21, 837 P.2d at 1272; citing also Pele Def. Fund v. Estate of James Campbell, Civ. No. 89-089, 2002 WL 34205861 (Haw. 3d Cir. Aug. 26, 2002)).

[170] Ka Pa'akai O Ka 'Aina v. Land Use Comm'n, 94 Hawai'i 31, 7 P.3d 1068 (2000).

[171] *Id.* at 1083 (2000).

[172] *Id.*

[173] FORMAN & SUSAN K. SERRANO, HO'OHANA AKU, A HO'OLA AKU, *supra* note 149, at 17 (citing *Ka Pa'akai*).

[174] HAWAI'I LEGAL AUXILLARY, THE LAW OF THE SPLINTERED PADDLE: KĀNĀWAI MĀMALAHOE, *available at* https://www.hawaii.edu/uhelp/files/LawOfTheSplinteredPaddle.pdf. King Kamehameha I declared this law after having attempted to attack with his spear an innocent group of people fishing along the shoreline. Kamehameha I accidentally slipped into a lava rock crevice. Not knowing Kamehameha's identity, two fishermen stayed behind while the others ran away in fright. In their defense, they struck Kamehameha with a paddle which splintered over his head and left Kamehameha unconscious. When Kamehameha awakened, he realized the error he committed as an ali'i charged with the responsibility to care for the common people and to treat them fairly. For this he instituted the Kānāwai Māmalahoe or Law of the Splintered Paddle which gave all people the right to travel along the roads and trails unmolested. The passage reads as follows:

THE LAW OF THE SPLINTERED PADDLE	**KĀNĀWAI MĀMALAHOE**
O my people,	E nā kānaka,
Honor thy gods;	E mālama 'oukou i ke akua
Respect alike (the rights of)	A e mālama ho'i i kānaka nui
Men great and humble;	a me kānaka iki;
See to it that our aged,	E hele ka 'elemakule,
Our women, and our children	ka luahine, a me ke kama
Lie down to sleep by the roadside	A moe i ke ala
Without fear or harm.	'a'ohe mea nana e ho'opilikia.
Disobey, and die.	Hewa nō, make.

[175] HAW. CONST. art. IX, § 10 (1978). ("The law of the splintered paddle, *mamala-hoe* kanawai, decreed by Kamehameha I – Let every elderly person, woman and child lie by the roadside in safety – shall be a unique and living symbol of the State's concern for public safety."); *See also* HAWAI'I LEGAL AUXILLARY, *supra* note 174, at 16.

[176] L. 1851; Haw. Rev. Stat. § 7-1 (1994).

[177] Palama v. Sheehan, 50 Haw. 298, 301, 440 P.2d 95, 97-98 (1968) (holding that the defendants established access rights under H.R.S. section 7-1 because the previous owners of their property historically used a trail running through plaintiffs' property. The trails provided access between the defendants' taro patches, which were located mauka (inland) of the plaintiffs' property, and their kuleana parcels at the seashore. The court held that defendants were entitled to a right-of-way across plaintiffs' land by reason of necessity, because flooding when it rained prevented access by a more indirect route. The court also allowed for vehicular access along the trail which was widened in 1890.); Rogers v. Pedro, 3 Haw. App. 136, 642 P.2d 549, cert. denied, 64 Haw. 689 (1982).

[178] Kalaukoa v. Keawe, 9 Haw. 191, 194 (1893).

[179] Haw. Rev. Stat. § 264-1(c).

[180] Haw. Rev. Stat. § 264-1(c)(1).

[181] The King v. Cornwell, 3 Haw. 154, 161 (1869).

[182] Haw. Rev. Stat. § 198D.

[183] *In re* Waiāhole Combined Contested Case Hearing, 94 Hawai'i 97, 128-146, 9 P.3d 409, 441-458 (2000).

[184] *Id.* at 137 (citations omitted).

[185] FORMAN & SUSAN K. SERRANO, HO'OHANA AKU, A HO'OLA AKU, *supra* note 149, at 29 (describing King Kamehameha's "sovereign prerogatives" attaching to all private property conveyed at the Māhele which "includ[ed]

the power '[t]o encourage and even to enforce the usufruct [right of enjoyment] of lands' and '[t]o provide public thoroughfares and easements, by means of roads, bridges, streets, etc.'" Principles Adopted by the Board of Commissioners to Quiet Land Titles in Their Adjudication of Claims Presented to Them (Aug. 20, 1846), 2 Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands 81, 85, *reprinted in* 2 REVISED LAWS OF HAW. 21242128 (1925)).

[186] NĀ ALA HELE TRAIL & ACCESS SYSTEM, *Moloka'i*, https://hawaiitrails.ehawaii.gov/island.php?island=Molokai (last visited Jul. 5, 2015).

[187] 16 U.S.C. § 470aa (1966), *amended by* Act of Dec. 19, 2014.

[188] 30 C.F.R. § 60.4 (2016)

[189] *Id.*

[190] HAW. ADMIN. R. § 13-284-6(b) (2015).

[191] HAW. REV. STAT. § 6E-3 (2015).

[192] *Id.* § 6E-3(1), (3)-(5) (2015.

[193] *Id.* § 6E-3(13) (2015)

[194] HAW. ADMIN. R. § 13-276-2 (2015) (explaining an archaeological inventory survey is a written report submitted to SHPD that identifies and documents the presence of archaeological and historic sites, including burial sites in a project area, and evaluates their significance).

[195] HAW. REV. STAT. § 6E-8 (2015).

[196] HAW. ADMIN. R. § 13-300-2 (2015).

[197] *Id.* § 13-300-3(b) (2015).

[198] 43 C.F.R. § 10.1(b)(1)(ii) (2014).

[199] 36 C.F.R. § 800.2(c) (2016).

[200] ADVISORY COUNCIL ON HISTORIC PRESERVATION, *Sec. 106 & the U.N. Declaration on the Rights of Indigenous Peoples: Intersections & Common Issues: Article 18 & Sec. 106* (2013), *available at* http://www.achp.gov/docs/UNDeclaration106.pdf.

[201] *Id.*

[202] *Id.*

[203] *Id.*

[204] *See* Haw. Rev. Stat. § 6E-5.5(b)(1) (2013).

[205] *See generally*, Rod Thompson, *Court Orders Trail, Bones Returned: The Hawaiian relics were moved during construction of a Big Isle residential area*, HONOLULU STAR BULLETIN (Aug. 3, 2001), http://archives.starbulletin.com/2001/08/03/news/story14.html; *see also* NATASHA BALDAUF & MALIA AKUTAGAWA, HO'I HOU I KA IWIKUAMO'O: A LEGAL PRIMER FOR THE PROTECTION OF IWI KŪPUNA IN HAWAI'I NEI 9-13 (2013).

[206] Harold Schaich, Claudia Bieling & Tobias Plieninger, *Linking Ecosystem Services with Cultural Landscape Research,* 19 GAIA 269, 270-71 (2010).

[207] HAW. ADMIN. R. § 13-300-2 defines a "lineal descendant" as a person who has "direct or collateral genealogical connections to certain Native Hawaiian skeletal remains." In contrast, a "cultural descendant" is a claimant who has demonstrated "genealogical connections to Native Hawaiian ancestors who once resided or are buried or both, in the same ahupua'a or district in which certain Native Hawaiian skeletal remains are located or originated from."

[208] *See* BALDAUF & AKUTAGAWA, *supra* note 205, at 76 (providing the step-by-step procedures for burial sites registration).

[209] D. KAPUA'ALA SPROAT, OLA I KA WAI: A LEGAL PRIMER FOR WATER USE AND MANAGEMENT IN HAWAI'I 7 (2009).

[210] *Id.*

[211] *Id.*

[212] *In re* Waiāhole Combined Contested Case Hearing, 94 Hawai'i 97, 132, 9 P.3d 409, 444 (2000).

[213] HAW. CONST. art. XI, § 1 (1978).

[214] *Id.* art. XI, § 7 (1978).

[215] *Id.*

[216] *Id.*

[217] SPROAT, *supra* note 209, at 9.

[218] *Id.*

[219] *See In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai'i 97, 9 P.3d 409 (2000).

[220] *See id*.

[221] *Id.*
[222] *Id.* at 133.
[223] *Id*.
[224] *See id.* at 140.
[225] *Id.* at 141.
[226] *Id.* at 142..
[227] Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention,* 68 MICH. L. REV. 471, 476 (1970).
[228] *In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai'i 97, 136, 9 P.3d 409, 448 (stating that "we thus hold that the maintenance of waters in their natural state constitutes a distinct 'use' under the water resources trust. This disposes of any portrayal of retention of waters in their natural state as 'waste'"); *see also* Nat'l Audubon Soc'y v. Superior Court of Alpine Cty., 33 Cal. 3d 419, 434, 658 P.2d 709, 719 (1983) (stating that a natural resource's ecological use and recreational use are public trust uses).
[229] *Waiāhole I*, *supra* note 228 at 137.
[230] *Id.* at 138 (holding "that the public trust may allow grants to private interests in trust resources under certain circumstance" but that in no way does private commercial use a protected pubic purpose that is protected by the trust).
[231] *Id.*
[232] *Id*. at 142.
[233] *Id.*
[234] *Id.* at 141.
[235] *Id*. at 142.
[236] *Id.*
[237] *Id.*
[238] *Id.* (quoting Robinson v. Ariyoshi, 65 Haw. 641, 649 n. 8, 658 P.2d 287, 295 n. 8 (1982)).
[239] *Id.* (citing Commonwealth Dep't of Envt'l. Resources v. Commonwealth Pub. Util. Comm'n, 18 Pa.Cmwlth. 558, 335 A.2d 850, 865 (1975)).
[240] *Id.*
[241] *Id*. at 132.
[242] *Id.* at 141.
[243] *Id.*
[244] D. Kapua'ala Sproat & Issac H. Moriwake, *Ke Kalo Pa'a o Waiāhole: A Case Study of the Use of the Public Trust as a Tool for Environmental Advocacy,* COMMON LAW REMEDIES FOR PROTECTING THE ENV'T 269 (Denise Antolini & Cliff Rechtschaffen eds., 2007).
[245] *Id.*
[246] Kelly v. 1250 Oceanside, 111 Haw. 205, 140 P.3d 985 (2006).
[247] *Id.* at 227 (stating that the County had "an affirmative duty" to ensure that a land developer complied with environmental protection conditions).
[248] *Id.* at 230 (stating that "although in some respect, exercise of DOH's authority is discretionary in nature, such discretionary authority is circumscribed by the public trust doctrine").
[249] *Id.* at 230-31, 140 P.3d at 1010-11.
[250] *In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai'i 97, 142, 9 P.3d 409, 453.
[251] STANDING COMM. REP. NO. 77, *reprinted in* 1 PROCEEDINGS OF THE CONST. CONVENTION OF HAW. OF 1978 686 (State of Hawaii 1980).
[252] *Waiāhole I*, *supra* note 250 at 142.
[253] *Id.*
[*254*] *In re* Wai'ola O Moloka'i, Inc. (*In re Wai'ola*), 103 Haw. 401, 422, 83 P.3d 664, 685 (2004) (quoting Ariz. Cent. for Law in Pub. Interest v. Hassell, 837 P.2d 158, 168–69 (Ariz.Ct.App. 1991).
[255] *Id.* at 422-23 (clarifying that beneficiaries include future generations, not just present generations).
[256] *Id.*
[257] *In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai'i 97, 9 P.3d 409, 449; *In re Wai'ola*, 103 Haw. at 442; *In re* Kukui (Moloka'i) Inc., 116 Haw. 148, 507-08, 174 P.3d 320, 346-47.
[258] *Waiāhole I,* 94 Haw. at 142.

[259] ST. OF HAW., DEPT. OF LAND AND NAT. RES., COMMISSION ON WATER RESOURCE MANAGEMENT, *Water Management Areas*, http://dlnr.hawaii.gov/cwrm/groundwater/gwma/ (last visited Apr. 23, 2014); *See* HAW. REV. STAT. § 174C-41 (2015).
[260] SPROAT, *supra* note 209, at 28. Nā Wai ʻEhā on Maui is currently the only surface water management are in Hawaiʻi; *Water Management Areas*, *supra* note 259. Like ground water designation, surface water management area designation adds heightened scrutiny and requirements for the use of surface water.; *See* HAW. REV. STAT. § 174C-41 (2015).
[261] HAW. REV. STAT. § 174C-92 (2015).
[262] *Id.* § 174C-3 (2015).
[263] HAW. ADMIN. R. § 13-168-7(a) (2015); *See* SPROAT, *supra* note 209, at 26 (detailing the requirements for surface water reporting).
[264] *See* HAW. REV. STAT. § 174C-92 (2015).
[265] HAW. ADMIN. R. § 13-168-31 (2015); *See* SPROAT, *supra* note 209, at 26.
[266] *See* HAW. REV. STAT. § 174C-48 (2015).
[267] HAW. CONST. art XI, § 1 (1978).
[268] *Deer growth mystery in Hawaii pits hunters against government,* FOX NEWS (May 23, 2012), http://www.foxnews.com/us/2012/05/23/deer-growth-mystery-in-hawaii-pits-hunters-against-government.html.
[269] Mark Chynoweth, Christopher A. Lepczyk, Creighton M. Litton, and Susan Cordell, *Feral Goats in the Hawaiian Islands: Understanding the Behavioral Ecology of Nonnative Ungulates with GPS and Remote Sensing Technology*, 41-42 (2010) (Poster Presentation, Proc. 24th Vertebr. Pest Conf.) *available at* http://www.markchynoweth.info/uploads/2/8/9/7/2897583/chynoweth_et_al._vpc_2010_41-45_feral_goats_in_hawaiian_islands.pdf
[270] *Id.* at 42.
[271] *Id.*
[272] Kepā Maly, Benton Kealiʻi Pang, & Charles Peʻapeʻa Makawalu Burrows, *Pigs in Hawaiʻi, from Traditional to Modern, available at* http://www.eastmauiwatershed.org/wp-content/uploads/2013/01/Puaa-cultural-fact-sheet-04.03.pdf.
[273] *Id.*
[274] *Id.*
[275] *Id.*
[276] *Id.*
[277] *Id.*
[278] Sérgio L. G. Nogueira-Filho, Selene S. C. Nogueira, & José M. V. Fragoso, *Ecological impacts of feral pigs in the Hawaiian Islands*, BIODIVERS CONSERV DOI 10.1007/s10531-009-9697-0 (2009), http://web.stanford.edu/group/fragoso/docs/Nougeiro%20Fragoso%202009%20Ecological%20impact%20Pigs.pdf.
[279] Chynoweth, Lepczyk, Litton, & Cordell, *supra* note 269, at 42.
[280] *Id.* (citing D. K. Morris, *Summer food habits of feral goats in Hawaii Volcanoes National Park*, unpublished National Park Service Report 17 (1969)). Study revealed that 98% native plant species were found in goat stomach contents in areas where native vegetation was abundant and there was a low population density of goats. In areas where goat density was high and native vegetation was scarce, the stomach contents of goats were 99% non-native plants.
[281] *Id.*
[282] *Id.* at 43.
[283] *Id.* at 42.
[284] *Id.* at 41.
[285] George H. Waring, *Preliminary Study of the Behavior and Ecology of Axis Deer on Maui, Hawaii.* Hawaii Ecosystems at Risk (HEAR) Project, *available at:* http://www.hear.org/AlienSpeciesInHawaii/waringreports/axisdeer.htm
[286] George H. Waring, *Preliminary Study of the Behavior and Ecology of Axis Deer on Maui, Hawaii*, HAWAII ECOSYSTEMS AT RISK (HEAR) PROJECT (2007), http://www.hear.org/AlienSpeciesInHawaii/waringreports/axisdeer.htm.
[287] *Id.*
[288] *Id.*
[289] Chynoweth, Lepczyk, Litton, & Cordell, *supra* note 269, at 43.

[290] THE CORAL REEF OF SOUTH MOLOKA'I, HAWAI'I: PORTRAIT OF A SEDIMENT-THREATENED FRINGING REEF iv (Michael E. Field et al. eds., 2008), *available at* http://pubs.usgs.gov/sir/2007/5101/sir2007-5101.pdf.
[291] *Id.* at 7.
[292] *Id.* at 144.
[293] *Id.*
[294] *Id.* at 7.
[295] *Id.* at 129.
[296] *Id.* at 7.
[297] *In re* Kamakana, 58 Haw. 632, 638-39, 574 P.2d 1346, 1350 (1978) (citing *In re* Boundaries of Pulehunui, 4 Haw. 239, 241 (1879) and *Harris v. Carter*, 6 Haw. 195, 197 (1877)).
[298] ANDRADE, *supra* note 55, at 30.
[299] Interview with Dr. Kaipo Perez, Recreation Specialist I, City & Cty. of Honolulu, in Honolulu, Haw. (Jul. 1, 2015).
[300] CAROL ARAKI WYBAN, TIDE AND CURRENT: FISHPONDS OF HAWAI'I 32 (1992).
[301] Russell Kallstrom, remarks at community meeting regarding Proposed Mo'omomi Community-Based Subsistence Fishing Area (CBSFA) Administrative Rules, in Ho'olehua, Hawai'i (Nov. 8, 2014) (on file with author).
[302] *Id.*
[303] DAVIANNA MCGREGOR, THE NATURE CONSERVANCY, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, MAKAKUPA'IA AND KAWELA, ISLAND OF MOLOKA'I 22 (2006) [hereinafter MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE].
[304] HAW. CONST. art. XII, § 7 (1978).
[305] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 451, 903 P.2d 1246, 1272 (1995).
[306] HAW. REV. STAT. § 7-1 (1994).
[307] State v. Zimring, 52 Haw. 472, 475 (1970) (citing De Freitas v. Trustees of Campbell Estate, 46 Haw. 425, 380 P.2d 762 (1963)).
[308] *PASH*, *supra* note 305, at 441.
[309] *Id.* at 447, note 39.
[310] *Id.* (citing State v. Zimring, 52 Haw. 472, 475 (1970) as "implicitly disapprov[ing] the 'time immemorial' standard when it indicated that 'the Hawaiian usage mentioned in HRS § 1-1 usage which predated November 25, 1892.'").
[311] *In re* Ashford, 50 Haw. 314, 440 P.2d 76 (1968) (relying on expert "reputation evidence" of kama'āina).
[312] Maly, Pang, & Burrows, *supra* note 272.
[313] McGregor, Cultural Assessment for the Kamakou Preserve, *supra* note 29, at 17.
[314] *Id.* at 18.
[315] *Id.*
[316] *Id.*
[317] *Id.*
[318] *Id.* at 16.
[319] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 451, 903 P.2d 1246, 1272 (1995) (citing State v. Zimring, 52 Haw. 472, 475, 479 P.2d, 204 (1970) as "implicitly disapprov[ing] the 'time immemorial' standard when it indicated that 'the Hawaiian usage mentioned in HRS § 1-1 usage which predated November 25, 1892.'").
[320] Maly, Pang, & Burrows, *supra* note 272.
[321] MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, *supra* note 29, at 15
[322] State v. Palama, No. CAAP—12—0000434, 2015 WL 8566696 (Haw. Ct. App. Dec. 11, 2015).
[323] *Id.* at 4 (citing State v. Hanapi*,* 89 Hawai'i 177, 186, 970 P.2d 845, 894 (1998) (quoting *PASH,* 79 Hawai'i at 449, 903 P.2d at 1270).
[324] *Id.* (citing *Hanapi,* 89 Hawai'i at 186, 970 P.2d at 494).
[325] *Id.* (citing *Hanapi,* 89 Hawai'i at 186, 970 P.2d at 494).
[326] *Id.* (citing *Hanapi,* 89 Hawai'i at 187, 970 P.2d at 495).
[327] *Id.* at 6.

[328] KAME'ELEIHIWA, *supra* note 86, at 33-36 (describing certain food restrictions placed on women, particularly foods considered kinolau (major physical forms) of male Akua (gods). These foods included banana, certain types of red fish, pig, and coconut. Female consumption of these foods constituted an act of defilement, not in the sense that women were inferior to men, but with the understanding that women were inherently powerful through their procreative abilities to birth land, gods, and chiefs. To consume these foods would lessen the mana of men. The separation of the sexes allowed both men and women to maintain their mana over certain roles. For the men, their mana was expressed in their sexual prowess, their skills in agriculture, as masterful warriors, deep-sea fishermen, navigators and ocean voyagers).
[329] *Id.* at 36-39 (describing the ali'i as intermediaries between the gods and the common people. As the gods had power over life and death, the ali'i through the 'Aikapu also had this power over the people. Maka'āinana who violated certain kapu, such as allowing their shadow to fall upon the ali'i or failing to prostrate before the ali'i, were put to death. This physical separation between ali'i and maka'āinana and the understanding that ali'i were representatives of nā Akua mirrored the manner in which Hawaiians perceived their gods, as entities to both fear and love. Conversely, ali'i were expected to be devout and in their religious protocols. A failure to do so provided grounds for maka'āinana to abandon their ali'i as poor leaders and conduits of the gods' favor)
[330] *Id.* at 44-45 (describing the worship of the war god Kū during eight months of the year. During this period, warfare was permitted and human sacrifices were made to Kū. Four months of the year were dedicated to the god Lono who represented peace and fertility. During these months hard labor was kapu and warfare forbidden. The people enjoyed a period of peace, feasted, engaged in hula and games. Ho'okupu offered to Lono in the months that ushered the new year (makahiki) were representations of the abundance of the land and accumulation of material wealth in the form of pigs and produce, kapa, and feathers)
[331] HANDY, HANDY & PUKUI, *supra* note 91, at 57-59.
[332] MARGARET TITCOMB, NATIVE USE OF FISH IN HAWAII 13 (2d. ed. 1992).
[333] *Id.* at 14.
[334] *Id.* at 8.
[335] *Id.*
[336] HAWAIIAN FISHING LEGENDS xviii (Dennis Kawaharada, ed., 1992).
[337] KAME'ELEIHIWA, *supra* note 86, at 30-31.
[338] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 437, 903 P.2d 1246, 1258 (1995)).
[339] *PASH*, 79 Hawai'i at 451, 903 P.2d at 1272.
[340] Ka Pa'akai O Ka 'Aina v. Land Use Commission, 94 Hawai'i 31, 45, P.3d 1068, 1082 (2000) (citing Stand. Comm. Rep. No. 57, *reprinted in* 1 PROCEEDINGS OF THE CONSTITUTIONAL CONVENTION OF 1978, at 639 (1980)).
[341] State v. Palama, No. CAAP—12—0000434, 2015 WL 8566696, 7 (Haw. Ct. App. Dec. 11, 2015) (citing State v. Pratt (*Pratt II*), 127 Haw. 206, 216-18, 277 P.3d 300, 310-312 (2012)).
[342] *Id.* at 8.
[343] *Id.*
[344] *Id.* at 8-9.
[345] *Id.* at 9 (citing Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 447, 903 P.2d 1246, 1268 (1995)).
[346] *Id.* (citing Stand. Comm. Rep. No. 57, at 639).
[347] *Id.* (citing Comm. Whole Rep. No. 12).
[348] *Id.* at 9-10.
[349] FIKRET BERKES, SACRED ECOLOGY 7 (3d. ed. 2012) (defining TEK as "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.").
[350] *Id.* at 3.
[351] *Id.*

5. RECOMMENDATIONS

This final chapter addresses the last two objectives of this report:

- **Develop a framework for a community-based Subsistence & Ahupuaʻa Management Plan for the Manaʻe Moku, Mauka to Makai; and**
- **Summarize Community Recommendations for the East Slope Management Plan**.

It aims to be clear in the roles and responsibilities of the various entities involved. The chapter concludes with a brief list of "Next Steps" for implementation.

This section builds on the information provided to meet the first two objectives of this report. The first objective entailed documenting Native Hawaiian traditional and customary practices of Manaʻe kamaʻāina. This information is provided in Chapter 3 on "Findings." The interviews and intake information gathered demonstrate that Native Hawaiian traditional and customary practices are still regularly exercised in Manaʻe, both in the form of subsistence activities, such as hunting, farming, fishing, and gathering, as well as in customary, religious, and ceremonial practices. Details of those practices are described and documented in the sections on cultural sites and trails, nearshore fisheries, and hunting. In addition, Chapter 3 summarizes the manaʻo shared by the community on the proposed East Slope Management Plan (January 2014 draft), and how it may potentially impact the people's ability to carry out their traditional and customary practices. While some informants had concerns that the expanded fence could cause some negative impacts in the short-run, such as having to jump over fences or locate step-overs to access certain areas, most recognized and supported the intended positive effects of repairing the watershed for the long-term ecosystem health.

Chapter 4 "Legal Framework and Analysis" addresses the second objective of assessing specific legal protections of Manaʻe kamaʻāina traditional and customary practices. The legal section is divided into specific areas of the law that correspond to manaʻo shared by Manaʻe kamaʻāina informants. This manaʻo is analyzed within the context of the proposed expansion of the East Molokaʻi Watershed Partnership (EMoWP). It covers traditional subsistence activities in Manaʻe, religious and ceremonial protocols, and efforts to mālama ʻāina. The chapter describes relevant constitutional and statutory provisions, as well as the body of common law developed from Hawaiʻi Supreme court decisions on Native Hawaiian rights.

Building on that information, this chapter takes the manaʻo shared by the kamaʻāina informants about their traditional and customary practices, along with the legal information pertinent to such practices in Manaʻe, and weaves them together to create the framework of the Subsistence and Ahupuaʻa Management Plan for Manaʻe Moku. It then summarizes the Community Recommendations for the East Slope Management Plan from the perspective of it being a key aspect of the overall restoration of the moku of Manaʻe from an indigenous mauka-a-makai standpoint. It should be noted that the authors recognize the stated desire of many community members to have one integrated plan, and advocate that the future Subsistence and Ahupuaʻa Management Plan be such a document. The original intent was for this document to be that plan. However, it was decided that it would instead take the first step of creating the framework and foundation for such a plan. A comprehensive moku-wide plan will require significantly more

resources to be fully adequate, including an in-depth and iterative community process. Furthermore, time constraints require that community recommendations for the East Slope Management Plan be shared while the project is still in its planning phase.

Since the recommendations within this Traditional & Customary Practices Report (TCP) provide for both short and long-term measures, and whereas some of these recommendations can be implemented in the short-term, and are within TNC's scope of work, we encourage the incorporation of those recommendations into the East Slope Management Plan. For those long-term strategies that need more community leadership and management outside of TNC's scope of work, we encourage that this TCP be utilized as a starting point for future discussions regarding comprehensive moku planning. In addition, other restoration projects within Manaʻe should continue to move forward, whether they are undertaken by individuals, families, organizations, or by ahupuaʻa. It is the authors' hope that even though this report it is not a "full plan," it can still be useful in securing funding for projects that are in alignment with what is presented here.

Regarding the input for the East Slope Management Plan, the majority of the community members interviewed, including kamaʻāina informants, do support the proposed fence, as long as it is done with additional management efforts that are rooted in Native Hawaiian mālama ʻāina values and traditional ahupuaʻa land management practices. From manaʻo shared by kamaʻāina informants, the following overarching/foundational principles were identified (for any and all planning processes for Manaʻe):

- **In developing a management strategy, utilize a holistic ahupuaʻa-based approach running from mauka to makai.**
- **Allow each ahupuaʻa to implement their own vision for their place**.
- **Ensure access for Native Hawaiian traditional and customary practices.**
- **Implement management strategies incrementally, observe impacts, and make adjustments accordingly.**
- **Conservation efforts should include the hiring of local residents and the utilization of community members in resource management.**

This report acknowledges that some informants are opposed to the utilization of a fence as any part of the conservation effort. The reasons are detailed herein. Some kamaʻāina informants shared their ideal scenario whereby a fence or some type of barrier would not be needed, and the people of Manaʻe could reclaim their traditional kuleana, both their rights and responsibility, to mālama (care for and manage) their ancestral/traditional lands or ahupuaʻa themselves. However, as many of these same informants have expressed, there are numerous challenges to enacting this proposition.

With this in mind, the recommended approach presented here is to honor all manaʻo shared, and to weave them together into a unified framework for a community-based Manaʻe Subsistence and Ahupuaʻa Management Plan, along with recommendations for the East Slope Management Plan. Additionally, this report incorporates traditional Native Hawaiian land management practices to complement and enhance modern conservation techniques.

The recommendations are presented in the following sections:

- **Framework for a Subsistence & Ahupua‘a Management Plan for the Mana‘e Moku, Mauka to Makai**
- **Community Recommendations for the East Slope Management Plan**
- **Next Steps**

5.1. FRAMEWORK FOR A SUBSISTENCE AND AHUPUA‘A MANAGEMENT PLAN FOR THE MANA‘E MOKU, MAUKA TO MAKAI

Various members of the Mana‘e community requested the creation of a community-based Subsistence and Ahupua‘a Management Plan in tandem with the East Slope Management Plan presented by TNC and the EMoWP. These plans are intended to be complementary to each other and are ideally conceived together as an integrated mauka-a-makai management framework. Ultimately, the authors advocate for an in-depth, iterative process with the community that would involve more time and funding, and would result in a detailed action plan with specific goals, timelines, and entities responsible for implementation. As one informant said, “yes, I support a larger plan that is community-based and addresses the entire moku, but it should go ahupua‘a by ahupua‘a, not one-size fits all. It’s gotta have specific recommendations for each ahupua‘a. I know that’s a lot of work, but that’s how it should be.”

Thus, what is presented here is a framework and foundation for such a plan. It is hoped that the full plan can be developed in the near future with additional resources, but fewer than would be necessary if starting from ground zero, since it can build on what is provided in this document.

First and foremost, the Subsistence and Ahupua‘a Management Plan for the Mana‘e Moku should be based on a solid foundation of Native Hawaiian values and principles, which includes: **the 8 Resource Realms and ‘Aha Decision-Making Process, the 5 Wao of the Ahupua‘a, and Mālama ‘Āina and ‘Ohana Values.** These three concepts were presented in Chapter 4, and are summarized here in relation to the recommendations.

5.1.1. The 8 Realms of Decision-Making under the ‘Aha Councils

As discussed in Chapter 4, historically there were certain ethics and realms of consideration upon which the ‘Aha councils of Moloka‘i based their decisions.[352] The eight realms of decision-making included consideration of[353]:

1) ***Moana-Nui-Ākea*** – the farthest out to sea or along the ocean’s horizon one could perceive from atop the highest vantage point in one’s area.
2) ***Kahakai Pepeiao*** – where the high tide is to where the lepo (soil) starts. This is typically the splash zone where crab, limu, and ‘opihi may be located; sea cliffs; or a gentle shoreline dotted with a coastal strand of vegetation; sands where turtles and seabirds nest; or extensive sand dune environs such as Mo‘omomi in northwest Moloka‘i that expand upward all the way to the mountain.
3) ***Ma Uka*** – from the point where the lepo (soil) starts to the top of the mountain.
4) ***Nā Muliwai*** – all the sources of fresh water, ground/artesian water, rivers, streams, springs, including springs along the coastline that mix with seawater.

5) ***Ka Lewalani*** – everything above the land, the air, the sky, the clouds, the birds, the rainbows.
6) ***Kanaka Hōnua*** – the natural resources important to sustain people. However, management is based on providing for the benefit of the resources themselves rather than from the standpoint of how they serve people.
7) ***Papahelōlona*** – knowledge and intellect that is a valuable resource to be respected, maintained, and managed properly. This is the knowledge of the kahuna, the astronomers, the healers, and other carriers of ʻike.
8) ***Ke ʻIhiʻihi*** – elements that maintain the sanctity or sacredness of certain places.

The ʻAha as a collective considered every decision around impact and benefit to the eight resource realms. The ʻAha would first identify and consider a given problem or situation; engage in a critical examination of potential solutions with consideration of their possible effects upon the eight resource realms; and ultimately implement solutions that "honor the ancestral past, address the needs of the present, and set up future generations to have more abundance."[354] Potential solutions were weighed according to how beneficial or detrimental they were to each realm. Kumu John Kaʻimikaua expressed that this wise management resulted in lōkahi, "the balance between the land, the people that lived upon the land and the akua (gods)." In turn, lōkahi manifested "pono, the spiritual balance in all things."[355]

Application to Subsistence and Ahupuaʻa Management Plan: It is recommended that the 3-Part Decision-Making Process adopted by the ancient ʻaha councils and the 8 Resource Realms of Decision-Making be utilized by whatever entity eventually oversees implementation of the Plan.

5.1.2. The 5 Wao of the Ahupuaʻa

Identification of wao, which modernly can be understood as bio-cultural zones,[356] is a helpful framework for understanding where Manaʻe hoaʻāina traditional and customary practices are concentrated and what types of management actions are most appropriate within each zone. The zones include the following: Wao Akua, Wao Kele, Wao Nahele, Wao Lāʻau, and Wao Kānaka. Multiple definitions of the 5 wao were shared in Chapter 4, thus abbreviated definitions are given below for reference:

1) ***Wao Akua*** – sacred, montane cloud forest, core watershed, native plant community, non-augmented and an area that was traditionally kapu (forbidden, prohibited).[357]
2) ***Wao Kele*** – saturated forest just below the clouds, the upland rainforest where human access is difficult and rare, and an area that is minimally augmented.[358]
3) ***Wao Nahele*** – remote forest, highly inconvenient for human access; a primarily native plant community; minimally augmented; and [utilized by early Hawaiians as a] bird-catching zone.[359]
4) ***Wao Lāʻau*** – a zone of maximized biodiversity, comprised of a highly augmented lowland forest due to integrated agroforestry of food and fuel trees, hardwood trees, construction supplies, medicine and dyes, and lei-making materials.[360]
5) ***Wao Kānaka*** – where the early Hawaiians chiefly settled. These were the kula lands, "the sloping terrain between the forest and the shore"[361] that were highly valued and most accessible to the people.[362] These were the areas where families constructed their hale,

cultivated the land, conducted aquaculture, and engaged in recreation.[363] Wao Kānaka did not terminate at the shore but extended into the sea.

Application to Subsistence and Ahupua'a Management Plan: It is recommended that the framework for the Plan is based on these 5 Wao.

5.1.3. Mālama 'Āina and 'Ohana Values

As reported, the overwhelming majority of cultural informants emphasized the need to recognize and respect Native Hawaiian mālama 'āina values, and agreed that any and all conservation efforts must include access that would allow for Native Hawaiian traditional and customary hunting and gathering rights, as well as any and all cultural practices. When we look at whether something has evolved into a cultural practice, a litmus test is to look at the 'ohana, or the family unit, while understanding that traditionally, the 'ohana is central to the life of the land.

Professor Davianna McGregor, who has interviewed a large number of cultural informants residing in "cultural kipuka" (rural areas that have maintained cultural understandings and practices),[364] identified common 'ohana cultural values and customs for subsistence and mālama. The essence of these understandings should be the standard by which to measure whether something is a cultural practice or not. It has to maintain the essence of these values. Many of the values and customs included in Professor McGregor's list were also identified by the cultural informants for this plan.

According to Professor McGregor, what distinguishes Hawaiian custom and practice is the honor and respect for traditional 'ohana cultural values and customs to guide subsistence harvesting of natural resources. Such 'ohana values and customs include but are not limited to the following:

1) Only take what is needed.
2) Don't waste natural resources.
3) Gather according to the life cycle of the resources. Allow the native resources to reproduce. Don't fish during their spawning seasons.
4) Alternate areas to gather, fish and hunt. Don't keep going back to the same place. Allow the resource to replenish itself.
5) If an area has a declining resource, observe a kapu on harvesting until it comes back. Weed, replant and water if appropriate.
6) Resources are always abundant and accessible to those who possess the knowledge about their location and have the skill to obtain them. There is no need to overuse a more accessible area.
7) Respect and protect the knowledge which has been passed down intergenerationally, from one generation to the next. Do not carelessly give it away to outsiders.
8) Respect each other's areas. Families usually fish, hunt, and gather in the areas traditionally used by their ancestors. If they go into an area outside their own for some specific purpose, they usually go with people from that area.
9) Throughout the expedition keep focused on the purpose and goal for which you set out to fish, hunt, or gather.

10) Be aware of the natural elements and stay alert to natural signs, e.g. falling boulders as a sign of flash flooding.
11) Share what is gathered with family and neighbors.
12) Take care of the kūpuna who passed on the knowledge and experience of what to do and are now too old to go out on their own.
13) Don't talk openly about plans for going out to subsistence hunt, gather, or fish.
14) Respect the resources. Respect the spirits of the land, forest, ocean. Don't get loud and boisterous.
15) Respect family ʻaumakua. Don't gather the resources sacred to them.[365]

In terms of understanding Native Hawaiian traditional and customary rights, it is vital to understand that access and usage privileges are balanced by the responsibility to mālama. There are rights for access and usage, but there is also a kuleana, or responsibility to take care of resources. That understanding was embedded within the kapu system. Namely, strictures were placed on the harvesting of certain fish during their spawning times or kapu were placed on certain areas to allow for replenishment. Kapu were lifted once spawning periods ended and konohiki (resource managers) observed an abundant supply of fish in a given area. Thus, the understanding that access rights of hoaʻāina go hand-in-hand with a kuleana to mālama ʻāina.

Application to Subsistence and Ahupuaʻa Management Plan: It is recommended that over-arching values be agreed upon for the foundation of the Plan. The ʻohana values listed above can provide a solid starting point. In addition, the following values, which are closely related to (or based on) the ʻohana values, were identified through the process of developing this report. They may also serve as examples to be considered for the final Plan.

The "Icebox" Value – Many residents of Manaʻe talked about the ocean and the land as their "icebox." This is an important concept to discuss because people have different interpretations of what it means. The understanding of the icebox is that you grab the items you need to make a meal, then put everything back in – that's how the icebox works. You don't take everything out at once. Today, many feel that if they don't take the last ʻopihi then someone else will, which indicates a lack of understanding of the concept. "Icebox" means you should just take what you need for today, so that species can continue to reproduce and flourish tomorrow and for future generations.

Today, as cultural values erode, resource abuse is widespread. One kamaʻāina informant said, "you cannot take from the icebox if the icebox is broken." Basically, the "icebox" of Manaʻe needs to be fixed; that's where mālama comes in. Another value of Hawaiʻi's kapu system was the careful balance of multiple and potentially competing subsistence usages and ceremonial practices. Kūpuna practiced self-restraint to avoid over-harvesting and to ensure abundance. There was also active mālama taking place, some of which continues today. Numerous kamaʻāina informants expressed the value of exercising self-restraint so that the resources are maintained. Several of them also shared how they practice this ethic, such as one informant who said that he doesn't gather hīhīwai anymore to allow for replenishment and encourages others to do the same. One cultural informant described how he proactively conducted mālama practices through kanu (planting) and re-stocking hīhīwai and ʻoʻopu in streams that had lost or diminished populations of these native and endemic species. He also labored to provide a

healthy environment for these species by cutting back java plum trees that create a thick canopy overhead and shade out stream habitat and whose roots absorb too much water and cause stagnating conditions.

"Hunting Pono" Values – Similar concerns about eroding cultural values were raised by Manaʻe hunters. There is a sense that the younger generation lacks the values of older generations. There have been observations that many young hunters are not hunting for meat, but instead for trophy racks. This is indicated by facebook posts of their racks on the internet and only taking prime venison cuts and leaving the rest of the carcass on land to rot. Older hunters said they were taught to take every part, not to waste, and not to pollute. They would take as much meat as they could, and then bury the remains. Unfortunately, younger hunters are dishonoring these cultural subsistence values.

Some young hunters also access hunting grounds disrespectfully with loud ATVs instead of walking the hunting trails. The use of these vehicles to tear up traditional trails and enter resource abundant grounds is a form of disrespect and a lack of consciousness towards the ʻāina that feeds us. Elder cultural informants identified the value of walking to a place (vs. driving), since walking the trails affords the opportunity to see and monitor the resources, to know or learn where to go for resources, to appreciate what you have, and to approach respectfully. Also, accessing hunting (or fishing) spots by foot is a natural conservation method because people will be less prone to over-harvest when they have to carry everything out on their back.

In response to these observations, several kamaʻāina informants recommended the hunter education program be augmented to include conservation skills/techniques, along with mālama ʻāina values and practices. This was seen as a solid strategy since all individuals are required to attend hunter education classes to earn a hunting license. Young hunters can be taught cultural values and recruited to engage in conservation work so they develop a good ethic early on. Lastly, there was significant discussion on developing a "hunting hui" in order to conduct community hunts, pool resources, and operate under a common liability insurance that would satisfy the concerns of large landowners whose lands are accessed for hunting. Such a hui could also assist in various conservation activities – both on public and private lands – such as fixing fences, installing/repairing irrigation, etc., in order to give back to the landowners in exchange for access.

"Educational Values/The Value of Education" – Besides hunters, numerous other kamaʻāina informants talked about the need for education, both in terms of specific practices, as well as more overarching values. They believe the focus must be placed on re-instating traditional values within the community. One informant stated that there should be widespread education of the customary and traditional practices of taking only what you need, taking one plant and planting two or three in its place, and not hunting the same place repeatedly.

While it was widely agreed that education must be a key component of this Subsistence and Ahupuaʻa Management Plan, the specific components of that educational program still need to be developed. Some suggestions included education for hunting, fishing, fishpond restoration, native plant restoration, and loʻi kalo restoration. All of these courses could include a foundation of mālama ʻāina values and how to incorporate them into such practices.

5.1.4. Ahupua‘a Management Practices

Traditional ahupua‘a land management practices are founded on Native Hawaiian values and principles of mālama described above. Kama‘āina informants were asked, “If you were the konohiki, and you were in charge of taking care of your ahupua‘a, how would you do it?” There was a wide array of answers, from general values to specific practices. Many informants shared specific recommendations about their ahupua‘a or others in Mana‘e, where they and/or their ‘ohana carry out various cultural practices, such as taking care of heiau, restoring and planting lo‘i, gathering lā‘au lapa‘au and/or other native plants, utilizing traditional fishing techniques, restoring fishponds and streams, etc. It is critical that this knowledge is preserved to ensure that such practices will be perpetuated. And although much of their mana‘o is specific to their place, there were common threads, which are compiled below.

In addition, one group that we interviewed, Hui Aloha ‘Āina o Mana‘e (“the Hui”), created an outline for an “Aloha ‘Āina Ahupua‘a Training Program” (see Appendix C). It should be noted that this group wanted to implement their program without a fence. Still, their program included many of the main components that other informants identified, and is incorporated below.

Thus, what is presented in the following table is a summary of the key components as shared with us by the community members (largely kama‘āina informants) we interviewed, including the Hui. It summarizes the key recommendations shared, and should be added to as appropriate. The framework is presented in a table for ease of understanding and viewing. Following the table is a longer narrative that provides a more detailed explanation of the table. The narrative is in outline form and contains some of the place-specific recommendations shared.

Table 5.1: Mana‘e Subsistence & Ahupua‘a Management Plan Framework

WAO	NATURAL & CULTURAL RESOURCES	EXISTING CONDITION& THREATS	LEGAL PROTECTIONS	COMMUNITY MANAGEMENT RECOMMENDATIONS
WAO AKUA ● Sacred Forest ● Montane Cloud Forest ● Core Watershed ● Native-Plant Community ● Non-Augmented ● Traditionally Kapu area	○ Native Forest ○ Freshwater source ○ North to South Trails (e.g., Wailau to Mapulehu Trail) ○ Goat (some, both N & S side) ○ Pig (migrate between N & S) ○ Deer (some places like Pākaikai)	*A complete inventory needs to be done. EMoWP will be doing an Environmental Assessment (EA) and Cultural Impact Assessment (CIA) for each unit as they progress, which should cover Wao Akua for those areas.*	▪ Trails – Maintain Native Hawaiian cultural rights & practices to traverse on traditional trails for travel, subsistence, and religious purposes. Consider designation of all traditional trails as public trails under the State Na Ala Hele Trails program. ▪ Hunting – Provide waivers and/or Memoranda of Agreement (MOA) between local/community hunters, EMoWP, & other landowners. Form hunting hui/cooperatives with mandated liability insurance and initiate partnerships or agreements with large landowners for hunting access. Coordinate with hunter education and licensing program supplemental curriculum for traditional management and conservation work in tandem with EMoWP initiatives.[366]	❑ Wao Akua should be respected and largely left alone, which can be accomplished with fencing. ❑ Implement fence (where supported). ❑ Manage ungulates in order to protect the critical water resources located there. ❑ Remove invasive plants and re-plant natives, as feasible. ❑ Ensure access for hoa‘āina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access.
WAO KELE ● Saturated Forest (below clouds) ● Upland Rainforest (human access difficult and rare) ● Minimally Augmented	○ Native Forest ○ Streams ○ Waterfalls ○ North to South Trails (e.g., Wailau - Mapulehu Trail) ○ Goat (some, both N & S side) ○ Pig (migrate between N & S) ○ Deer (some places like Pākaikai)	*A complete inventory needs to be done. EMoWP will be doing an EA and CIA for each unit as they progress, which should cover Wao Kele for those areas.*	▪ Trails – same as above. ▪ Hunting – same as above. ▪ Streams – consider application to State Water Commission for Surface Water Management Area Designation of important streams. Work with Water Commission to determine In-Stream Flow Standards and include community collaboration (critical to determine how much water is needed for traditional and customary practices and stream health).	❑ Implement fence (where supported). ❑ Manage ungulates; Implement hunting recommendations detailed in narrative below. ❑ Remove invasive plants and re-plant natives, as feasible. ❑ Ensure access for hoa‘āina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Maintain and restore native stream ecology.

WAO	NATURAL & CULTURAL RESOURCES	EXISTING CONDITION& THREATS	LEGAL PROTECTIONS	COMMUNITY MANAGEMENT RECOMMENDATIONS
WAO NAHELE ● Remote Forest (highly inconvenient for human access) ● Primarily Native Plant Community ● Bird-Catching Zone ● Minimally Augmented	○ Native Forest ○ Streams ○ Waterfalls ○ ʻOʻopu ○ Hīhīwai ○ North to South Trails (e.g., Wailau - Mapulehu Trail) ○ Goat, Pig, Deer ○ Lei plants (e.g., maile)	*A complete inventory needs to be done. EMoWP will be doing an Environmental Assessment (EA) and Cultural Impact Assessment (CIA) for each unit as they progress, which may include Wao Nahele in those areas.*	▪ Trails – same as above. ▪ Hunting – same as above. ▪ Streams – same as above.	❑ Protect Waiakeakua, the waterbowl that feeds all streams. ❑ Implement fence (where supported). ❑ Manage ungulates; Implement hunting recommendations detailed in narrative below. ❑ Remove invasive plants and re-plant natives, as feasible. ❑ Restore Ulu Kukui o Lanikaula at Puʻu o Hoku to catch the rain cloud. ❑ Ensure access for hoaʻāina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Maintain and restore native stream ecology.
WAO LĀʻAU ● Lowland Forest ● Maximized Biodiversity ● Highly Augmented due to Integrated Agroforestry (food and fuel trees, hardwood trees, construction supplies, medicine and dyes, lei materials)	○ Native Lowland Forest ○ Trails: lateral - between ahupuaʻa; vertical N-S, mauka-makai ○ Goat, Pig, Deer ○ Streams: ʻoʻopu, hīhīwai ○ Springs ○ Brackish water fish species that swim and feed upstream: e.g., ʻaholehole, mullet ○ Cultural sites: heiau, puʻuhonua, etc. ○ Native plants: kukui, wauke, ulu, pepeiao ○ Lei Plants: maile, ginger ○ Construction wood and plant fibers for structures and implements ○ Loʻi kalo	*A complete inventory needs to be done for Wao Lāʻau. Should be done as part of next steps.*	▪ Trails – same as above. ▪ Hunting – same as above. ▪ Streams – same as above. ▪ Appurtenant Water Rights - an inventory should be done to determine appurtenant water rights associated with loʻi kalo (taro lands) (loʻi) and ʻauwai (irrigation ditches) which have reserved water rights from the time of the Māhele. ▪ Wahi pana – Inventory important wahi pana and cultural sites, and petition to include them in National and State Historic Sites Registries.	❑ Implement fence where feasible and supported. This is most likely lower than proposed fenceline, so would require additional landowner agreements. ❑ Manage ungulates; implement hunting recommendations. ❑ Remove invasive plants and re-plant natives, ❑ Restore Ulu Kukui o Lanikaula at Puʻu o Hoku ❑ Ensure access for hoaʻāina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Maintain and restore native stream ecology. ❑ Restore koʻa for ceremonial offerings and to serve as a line of sight to important traditional fishing grounds in the ocean. ❑ Cultural sites should be cared for and maintained. Mālama should be carried out by hoaʻāina families as feasible.

WAO	NATURAL & CULTURAL RESOURCES	EXISTING CONDITION & THREATS	LEGAL PROTECTIONS	COMMUNITY MANAGEMENT RECOMMENDATIONS
WAO KANAKA ● "Hawaiian Footprint" Zone ● Habitation ● Agriculture ● Aquaculture ● Recreation	○ Cultural sites (e.g., heiau) ○ Burials ○ Trails (lateral - between ahupuaʻa and N-S, mauka-makai) ○ Canoe plants/trees: ʻulu, maiʻa, ʻuala, kalo (wet & dryland) ○ Native plants/trees: kukui, wauke, pepeiao, etc. ○ Lei Plants: maile, ginger, ti leaf, etc. ○ Fishing koʻa ○ Shoreline resources: limu, crab, pipipi, kupeʻe, ʻopihi, ʻopae, etc. ○ Ocean resources: fish, heʻe, honu, etc. ○ Fishponds ○ Estuaries ○ Springs entering shoreline/ocean ○ Stream resources: ʻoʻopu, hīhīwai, prawns ○ Reef patches tended as sea gardens (associated with women) ○ Manini houses (tended by women) ○ Special fishing grounds tended by ʻohana (linked to koʻa on land) ○ Reef ○ Open Ocean	*A complete inventory needs to be done for Wao Kanaka.* *Should be done as part of next steps.*	▪ Streams – same as above. ▪ Wahi pana – same as above. ▪ Protect ancient burial sites through official burial registration with State Historic Preservation Division. ▪ For landowners not in the Watershed partnership and who own property below proposed fenceline, draft right of entry agreements for kamaʻāina families to do restoration, such as native plantings with mobile fencing units to restore lowland forests. ▪ Create hui or cooperative for cottage industry development among kamaʻāina families to operate native plant nurseries for reforestation work. ▪ Create agreements between native plant nursery growers and implementers of restoration work (EMoWP for mauka areas) for purchase of native plants. ▪ Initiate strategy for leasing of State-owned fishponds for restoration work, food production, reopening and protecting springs. ▪ Participate in new statewide streamline permitting process for fishpond restoration and utilization. ▪ Investigate new/additional zoning consistent with this Manaʻe TCP & larger ahupuaʻa plan. ▪ Prevent filling and building on wetlands through strict enforcement of zoning and permitting requirements. ▪ Investigate illegal grading and grubbing activities taking place without a permit to protect ahupuaʻa resources, especially springs, streams and nearshore area from siltation and non-point source pollution. ▪ For overall protection of nearshore fisheries, initiate process and proposed management plan for Community-Based Subsistence Fishing Area (CBSFA) designation. ▪ Institute protections for endangered green sea turtles in critical mating and nesting areas (eg ʻAhaʻino, Honomuni). Minimize negative land-based activities that contribute to deterioration of essential habitat.	❑ Remove invasive plants and re-plant natives, as feasible. ❑ Ensure access for hoaʻāina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Restore koʻa and line of sight from ocean. ❑ Cultural sites should be cared for and maintained. Mālama should be carried out by hoaʻāina families as feasible. ❑ Maintain and restore native stream ecology. ❑ Establish native nurseries with mauka and makai species. ❑ Loʻi and ʻauwai should be restored, re-opened, and kalo planted for production. Loʻi can also be utilized as silt traps to reduce run-off. ❑ Support sustainable farming for personal and commercial production. ❑ Support fishpond protection and restoration efforts. ❑ Remove invasives, such as gorilla ogo limu, or invasive fish like roi. ❑ Implement shoreline monitoring and offshore monitoring. ❑ Explore options for community-based resource management of marine resources through obtaining Community-Based Subsistence Fishing Area (CBSFA) designation.

*Note: This table reflects a synthesis of the manaʻo of kamaʻāina informants of Manaʻe. The ʻAha Moku o Koʻolau/Manaʻe requested that this Traditional and Customary Practices Report be done with an integrated ahupuaʻa management approach that reflects kūpuna (Hawaiian ancestral) practice and decision-making. In addition to the above table, which summarizes the primary actions proposed, below is a more detailed description of these recommendations.

Narrative to support preceding table with more detailed recommendations:

- **Restore natural resource infrastructure to bring back the regular rains (reported to have been daily) that numerous kamaʻāina informants recalled, and increase soakage in landscape, which includes restoration of native forests in mauka areas, as well as lowland forest.** This includes the following specific recommended actions:
  - Protect **Waiakeʻakua,** identified as "the birthplace of waters," and described as "the most important water source because it feeds every stream on that side of the island." It's critical that this area be protected because it acts like a sponge that soaks up the moisture, like Kamakou Bog; its health is vital to the overall watershed health.
  - Restore and re-forest **Ka Ulu Kukui o Lanikaula**, the sacred kukui grove located on Puʻu o Hoku Ranch lands, which is said to be the key to bringing back the rains to Manaʻe.[367] Develop community agreement with Puʻu o Hoku Ranch to re-plant kukui and have local families provide native plant nurseries for that.
  - Remove invasive plants, such as kiawe and Java Plum, and re-plant natives in forest succession pattern. Re-create the native forests by simultaneously planting all levels (ground-cover, sub-canopy, canopy, etc.). Plant in accordance with the Wao (Wao Lāʻau is the food forest; Wao Kanaka is the human agricultural zone), and use species that also provide materials for building, crafts, clothing, and food (canoe plants). Support the creation of groves and orchards.
  - Start native plant nurseries that provide stock for such plantings.
  - Utilize the orographic effect for strategic native tree plantings at various height intervals; steady trade winds carry moisture from the ocean, causing condensation on trees. Trees are responsible for 40% rainfall by lift. This is orographic or "lift rain" that is capable of recycling over time to produce 100% rain from a cloud forest in the Wao Akua and Wao Nāhele. Tree lines cause the wind to spiral vertically and descend back down to hit succeeding tree lines along higher elevations. If trees are strategically planted at different height intervals, it will cause several of these spirals as it travels up the mountain top. As a result, bands of rainfall will form along the various altitudes and tree lines and travel down ahupuaʻa from mauka to makai.
  - In areas below EMoWP's fenceline, provide mobile fences to protect new saplings until they grow to a certain height and trunk size that make them invulnerable to ungulate grazing.
  - Engage in responsible plant gathering practices that promote continued and healthy growth.
  - Initiate a program similar to efforts undertaken in Niger, Africa in Farmer Managed Natural Regeneration (FMNR) where heavily grazed native tree plants can be restored through strategic trimming and pruning work to assist them to grow straight and tall, rather than bush-like.[368]

- Set-up water catchments to collect rainwater to irrigate plants.
- Create kīpuka (oases) that will allow for regenerative growth of lowland forests in the long-term. Start by strategically growing appropriate water plants near springs that will add to water absorption in the landscape and eventually create more moisture rich habitat for lowland forest restoration.
- Plant utilizing methods that capture rain/moisture and reduce erosion, which will be unique to each location, but could include techniques such as staggered net-and-pan plantings that circulate water from plant to plant and tree to tree. Incorporate earthworks, such as building and restoring terraced areas for loʻi and installing swales for planting trees. Utilize loʻi for the dual purpose of cultivating kalo and serving as silt traps to purify water and avoid siltation in fishponds and on reefs. Identify plants that hold soil in place; don't remove a tree (even if invasive) without re-planting with something else (plant more than one tree).
- Use cabins for not only hunter access, but for restoration work as appropriate.
- Collaborate with people already doing restoration work and build off of their efforts and successes.

- **Preserve and re-open the springs that contribute to muliwai (brackish water), especially where ancient fishponds are located:**
  - Springs are an important part of moʻolelo of the area and contribute to overall food and water security.[369]
  - Restore walls of dilapidated fishponds to prevent sand and rocks that may be brought in by ocean currents from covering the springs that enter into the ocean. As one kamaʻāina informant said, "It is well-known that fishponds were typically constructed around underwater springs. Part of the reason that they were constructed was to protect these springs from stones and sand debris that could potentially cover these springs were it not for the presence of the kuapā (fishpond wall)."
  - Remove mangrove that have established themselves on and around these springs.
  - Consider again the orographic effect, and how muliwai feeds the rain coming off the ocean onto the land, impacting plants mauka.
  - Estuaries are known as some of the most vital and productive areas. The mix of fresh and salt water along with rich stream and spring nutrient inputs result in a multitude of niches for marine flora and fauna. Estuaries also serve as important feeding, spawning, and nursery grounds and are the entry and exit points for diadromous species.

- **Re-open old spring-fed loʻi that were part of the loko iʻa kalo complex (areas where loʻi kalo fed loko iʻa and nutrients were cycled between the two):**
  - Restore loʻi and plant kalo.
  - Remove invasive trees (especially water-intensive species, like Java Plum) located on old loʻi terraces.
  - Clean out ʻauwai connecting streams to loʻi (e.g., Hau trees).
  - Restore loko iʻa.
- **Restore streams:**

- Remove invasive canopy trees that shade streams and suck up water (e.g., Java Plum).
- Plant natives along stream banks to stabilize, such as akakai grass. Native plants along banks also promote build-up of detritus (algal and micro-algal growth) as a food source for fish such as mullet and āholehole, which swim upstream; they need the stream cleared to do so.
- Restore habitat for hīhīwai and ōʻōpu through stream maintenance. Consider re-introduction of such species.
- Conduct stream monitoring.

- **Restore loko iʻa (fishponds):**
  - Remove mangrove, re-open springs
  - Remove invasive limu, re-plant with native and other edible limu for fishfeed and human consumption for subsistence.
  - Erosion control efforts in mauka regions also beneficial to the ocean.
  - Improve micro-ecosystem (habitat) for fish, especially those that are attracted to muliwai (mullet, awa, āholehole).

- **Restore reef and protect fishing grounds:**
  - Identify and reduce harvesting of grazing fish that eat limu to reduce algal domination on the reef.
  - Recognize Native Hawaiian families that have ancestral and on-going special relationships with certain fishing spots that were deliberately cultivated (e.g., fishing koʻa, certain reef patches, manini houses).
  - Restore corresponding fishing koʻa/shrines or markers on land.
  - Remove invasive limu, re-plant with native and other edible limu for fishfeed and human consumption for subsistence.
  - Identify critical fish nursery areas and feeding grounds, nesting, spawning and reproduction of fish, turtle, and other marine species.
  - Seek special legal protections for coastal resources through Marine Life Conservation District (MLCD), Fisheries Management Area (FMA), or Community Based Subsistence Fishing Area (CBSFA) designations. Special estuaries we would likely need to protect include Honouliwai, Honoulimaloʻo, and Hālawa.
  - Recognize traditional nearshore fisheries (konohiki fisheries) that include fishing area from the shoreline to the edge of the barrier reef, or where there is no reef, one (1) mile from the shore. This means limiting recreational activities that pose a potential safety hazard to fishermen (skindivers), such as wind-surfing, kite-surfing, jet-skiing, water skiing, knee boarding. Maintain and enforce the law of no jet-skis/thrill-craft, as well as other activities that would disrupt fish schools, feeding, and nursery areas.

- **Recommendations for cultural sites and trails:**
  - Restore, preserve, and maintain cultural sites, such as heiau, koʻa, etc. Mālama should be carried out by kamaʻāina families as feasible and appropriate.
  - Restore, preserve, and maintain mauka-makai trails and trails traversing the Koʻolau and connecting the north and south faces of the island.
  - Ensure that the fence does not obstruct these trails.

- There were lateral trails that connected ahupuaʻa. Identify, map, restore, and maintain those trails. Research if there was an alaloa; if so, map and restore it.
- Establish multi-purpose cabins at strategic points along ahupuaʻa clusters for plant maintenance of trails and cultural sites, as well as watershed restoration (removal of invasive and planting of natives) and hunting.

- **Improve large-scale land management practices:**
  - While some large landowners utilize sustainable land management techniques, others were identified by kamaʻāina informants as having engaged in poor land management practices, such as cattle ranching in steep areas; grading, grubbing, and clearing large land areas which punctured water veins and dried up important spring lines below. These actions resulted in erosion, flash-flooding, ʻoʻopu and hīhīwai die-offs, landslides and mudslides, mud deposits on sensitive turtle nesting grounds, ocean fouling, and reef siltation. There should be a call to action for these landowners to become good neighbors and work with the community to improve their land management practices, and thereby contribute to overall watershed and ahupuaʻa health.
  - Review the Molokai Community Plan, map out certain areas that are critical to the overall watershed health, and include these recommendations in the Community Plan.
  - Review zoning, including the Special Management Area (SMA) near the shoreline; ensure there is legal development within those zones, as well as enforcement for grading and grubbing permits.
  - Work with large landowners to create agreements with community to do the proposed conservation work, such as cleaning streams and springs, re-opening and clearing of trails, removal of invasive species, and re-planting of natives. These agreements could take the form of conservation or cultural easements, an MOA for right-of-entry, etc. Discuss the possibility of exchanging hana (work) for permission to hunt on large landowner property. Also discuss topics of liability, the creation of a hunting hui with common liability insurance, hunter education program with conservation training and work, and creating a Manaʻe specific hunter manual for safety, conservation, and work projects with large landowners.

5.2. COMMUNITY RECOMMENDATIONS FOR THE EAST SLOPE MANAGEMENT PLAN

This section presents a summary of community input and recommendations for the East Slope Management Plan (January 2014 draft). It is composed primarily of recommendations that are related to the proposed fence and those activities directly impacted by it, such as hunting, along with other traditional and customary practices within the proposed fenceline.[370] Overall, the majority of kamaʻāina informants interviewed are in support of the fencing project as proposed. However, other viewpoints were expressed as well, which were documented in more detail in Chapter 3. Thus, what follows is a summary of those perspectives. They are presented in the five (5) primary ways this conservation effort could be pursued, based on what was presented in the East Slope Management Plan and the input received for this process.

Community Manaʻo Regarding Proposed Fencing (summary of details in Chapter 3)

- **Proposed Fencing: Puaʻahala to Hālawa** – *as proposed in the East Slope Management Plan (January 2014 draft).*
    - Overall, the proposed fencing from Puaʻahala to Hālawa has substantial support by the kamaʻāina informants interviewed, as long as access for traditional and customary practices is ensured with the implementation of step-overs (which the East Slope Plan includes). Many also suggested additional management for the areas makai of the fenceline (to be implemented by kamaʻāina and various cultural groups who have already stepped forward, or who will step forward to take on the kuleana of implementing the Subsistence & Ahupuaʻa Management Plan). Several informants also stated that they would like to see mitigation efforts for unfenced areas that may be impacted by changed migration patterns of ungulates. However, not every ahupuaʻa supports the fence (specific ahupuaʻa identified below). Thus, it is recommended that the fence be implemented, first and foremost, in those areas that support it.

- **Alternative #1: Fencing with Pākaikai Corridor** – *a possible alternative presented in the East Slope Management Plan due to it being a preferred deer hunting area and being characterized by relatively degraded native forest.*
    - Alternative #1: Fencing all of Manaʻe with the exception of leaving a corridor at Pākaikai open has very little community support due to the potential negative impacts to the land, cultural sites, and water resources within the proposed corridor from heavy ungulate migration and traffic to this area. This alternative should not be pursued.

- **Alternative #2: No Fencing**
    - Of the kamaʻāina informants interviewed thus far, a few ahupuaʻa (hoaʻāina of the ahupuaʻa) have stated that their over-riding sentiment is "no fence" (specific ahupuaʻa identified below). Thus, it is recommended that the residents/kamaʻāina of those areas begin a dialogue with the implementers of the fence (TNC) about their desire to manage their place themselves. It is possible that as the initial fencing units are implemented west of them, the impacts may be seen as positive and worth implementing within their ahupuaʻa. If not, then alternatives should be pursued (see next alternative).

- **Alternative #3: Mauka-Makai Connector Fencelines** – *an alternative proposed by some kamaʻāina informants that are opposed to the mauka fencing project (East Slope Plan), and concerned about the spillover impacts to their ahupuaʻa where the proposed open corridor exists.*
    - Kamaʻāina proposed the construction of mauka-makai fences as connecting links to TNC/EMoWP's lateral fenceline that would be constructed along the pristine forest-edge. This strategy may serve to mitigate harm to neighboring, unfenced ahupuaʻa and abate concerns of ungulate outmigration and spillover into these unprotected areas.

- It is also in alignment with the sentiment of other kamaʻāina informants that communities in each ahupuaʻa should take care of their own issues without harming neighboring ahupuaʻa. This sentiment was shared by hunters who felt that each ahupuaʻa or ahupuaʻa "cluster" (where several ahupuaʻa are small in size and can combine their efforts) should conduct community hunting activities to control ungulate populations to a sustainable level and distribute meat to the families living in their area.
- The mauka-makai fence would serve to keep ungulates within their ahupuaʻa of origin while community hunters could organize regular campaigns to thin out herds within their own ahupuaʻa. One kamaʻāina hunter proposed a unique method for organizing community hunts along native, traditional fishing principles and strategies like "surround-net" and what could be likened to how loko ʻumeʻiki (fish trap ponds) are constructed and utilized. This hybridized method for hunting ungulates would entail setting up posts spanning the vertical length of ahupuaʻa. These posts would be established at 10 meter increments in the outline of a heʻe (octopus) head with ʻawe (legs) extending or fanning outward. On community hunt days, cargo net could be laid along these posts to form the shape of the heʻe much like surround net is laid in the ocean. Hunters located at lower elevations of the ahupuaʻa could "paipai" (scare) ungulates by coordinating their movements upward until the ungulates are trapped and cinched within the poʻo (head) of the heʻe.
- TNC has expressed some concerns about additional costs associated with mauka-makai connecter fences. The authors urge that this alternative be seriously considered if TNC and the EMoWP wishes to build and maintain a good-faith relationship with communities living in unfenced areas. Further dialogue will need to take place between kamaʻāina, large landowners, TNC, and all other key partners involved, with careful consideration to costs, potential impacts, and alternative management methods. Additional considerations are included in Table 5.3.

- **Alternate #4: Integrating "Release Valves" Between Fenced Sub-Units to Facilitate Ungulate Movement and Aid in Community Hunts** -- *an alternative to mauka-makai connector fences that would also address concerns of ungulate migration and spillover impacts to large unfenced corridors.*
  - If mauka-makai connector fences are too cost-prohibitive, another suggestion was offered that would entail creating incremental "release valves" between fencing sub-units in each ahupuaʻa/ahupuaʻa cluster. These "release-valves" are envisioned as open, vertical mauka-makai, N-S directional pathways that run between and parallel to TNC/EMoWP's fencing sub-units like mākāhā (gate openings) in loko kuapā (fishpond walls). To minimize further degradation of the Wao Akua and Wao Nāhele, these mākāhā-like pathways or release valves could be strategically located in areas that do not have intact native forests. These pathways could also run along the contour of the land to minimize erosion.
  - The function of these land mākāhā or release valves would be to control the flow of ungulates along various ahupuaʻa and mitigate spillover to the large open and unfenced corridor from Waialua to Hālawa. Each ahupuaʻa will have a fair share

of meat and hunters will not have to travel outside of their ahupuaʻa to hunt. This would also ensure that each ahupuaʻa will still have access in their area to animals for subsistence hunting. In this manner, increased hunting pressure and safety threats for homes located in the large open corridor from Waialua to Hālawa will be avoided.
    - Community hunts can also be strategically organized along these mākāhā openings or release valves since animal traffic is more likely to flow along these pathways. As a matter of human safety and to avoid hunting accidents with regular hikers, care must be taken to not site these mākāhā along ancient, traditional foot trails where people usually traverse.

- **Alternative #5: Lowered Fenceline** – *an approach recommended by some kamaʻāina informants whereby the proposed fenceline would be implemented lower than currently proposed in order to allow for the original native lowland forest to recover that was located within the Wao Lāʻau.*
    - Overall, this alternative should be considered in areas where the kamaʻāina and large landowners are interested in doing so. It has the potential to have an even greater impact to the health of the overall ahupuaʻa; however, it would also require additional landowners to join the East Molokai Watershed Partnership.

- **Additional Community Manaʻo Regarding Fencing** – *the recommendations below are elaborated on in Table 5.3.*
    - Smaller and More Manageable Sub-Units
    - Active Engagement and Inclusion of the community, especially hunters
    - Traditional Fishing Methods Adapted to Land in order to Manage Ungulate Populations.

Manaʻo Shared by the Hoaʻāina (native tenants) of each Ahupuaʻa Cluster

It is important to note that "hoaʻāina" legally refers to native tenants currently living in a specific ahupuaʻa, which is why it is used in the heading of this section. Based on the interviews conducted, tenants of each ahupuaʻa had very different perspectives and priorities. This makes sense based on the history of each ahupuaʻa being relatively separate and independent in their land management. Thus, the recommendation is that for those ahupuaʻa who want the fence, where that community is basically united on that approach, and the large landowners are a part of the partnership, then those ahupuaʻa should move ahead and implement their vision for their place.

In contrast, there are hoaʻāina of certain ahupuaʻa who are strongly opposed to the fence. In most of these cases, the hoaʻāina do not have a good relationship with the large landowners (or *some* of the landowners) in their ahupuaʻa. Often it is because they disagree with the way these landowners are currently managing their property – implementing land use practices that are not sustainable, or not within the spirit of mālama, but degrade ahupuaʻa health. Thus, it is these hoaʻāina who feel they should manage their own ahupuaʻa without a fence. In general, those informants who feel this way also believe they have the ʻike (knowledge) to do that. Perhaps in the future these hard feelings that are being experienced between large landowners and

community members can be worked through, but for now we need to look at each ahupuaʻa, or clusters of ahupuaʻa, and ensure that their vision is included in this plan.

In the ʻAha Council system, decisions were made along ʻAha Ahupuaʻa as well. So if a proposed action only affected that one ahupuaʻa, then councils would decide on the ahupuaʻa level, and the ʻAha Moku at the district level was not triggered for decision-making. We are finding as we are interviewing different families within different ahupuaʻa that they're often of one mind, so we can consider this as making decisions along the ahupuaʻa level. This is useful in cases such as this one, where the entire moku does not agree. If that's the case, then we must be sure that decisions made affect only that ahupuaʻa and not the others, which is when other strategies should be explored, such as mauka-makai fences.

The table below is a summary of manaʻo shared by the 44 key (mostly kamaʻāina) informants interviewed and/or surveyed (with an Intake Form) for this process. The authors took care to identify and talk to representatives of as many key long-time kamaʻāina families as possible, as well as to coordinate with TNC on who to talk to. In addition, TNC has talked with many of these same families, and is currently in the process of doing outreach to the residents of each ahupuaʻa as their project progresses, beginning with the Pākuʻi Unit, which consists of the ahupuaʻa of Puaʻahala, Kaʻamola, Keawanui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha. Thus, as shown below, the informants interviewed for this process who live in the ahupuaʻa within the Pākuʻi Unit are generally in support of the fence as proposed by the most current East Slope Management Plan update (as of October 2014).[371]

Table 5.2: General Sentiment Towards Proposed Expanded Fence by Ahupuaʻa or Ahupuaʻa Cluster, From West to East

Ahupuaʻa	General Sentiment
Puaʻahala, Kaʻamola, Keawanui	Support the fence.
West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe	Support the fence.
Kaluaʻaha	Majority support the fence, some concern about access for subsistence practices.
Mapulehu, Pukoʻo, Kūpeke	Unknown (none interviewed).
ʻAhaʻino	Some against the fence, some support.
Honomuni, Kawaikapu, Kainalu, Pūniuʻōhua	Support the fence.
Waialua, Moanui, Kumimi	Some against fence, especially if there is a corridor created through this area (the Pākaikai Corridor alternative). The main concern is the outmigration and spillover of ungulates into this open corridor that would foul important streams that residents rely on for both agricultural and domestic purposes.
Honouliwai, Honoulimaloʻo	Support the fence. They recommended go slow, see if the first fence works out and adjust management accordingly. Some concern about Pākaikai Corridor also because they are reliant on stream water for both agricultural and domestic use.
Puʻu o Hoku Ranch lands	Undecided.
Hālawa	Support the fence. Emphasized the need for all ahupuaʻa tenants to be informed.[372]

*Note: This table is only based on the 44 informants surveyed for this process.

The following table presents the recommendations for the East Slope Management Plan shared by the kamaʻāina informants interviewed for this report. In December 2014, the authors met with EMoWP/TNC to review these recommendations, thus, their initial feedback is included as well.

Note new abbreviation utilized in table: "SAMP" (Subsistence & Ahupuaʻa Management Plan) to minimize table size.

Table 5.3: Community Suggestions for East Slope Management Plan

Community Suggestion	Additional Community Mana‘o	Initial EMoWP/TNC Molokai Feedback	Implementation
1. Create small, manageable fenced sub-units with priority to absolutely pristine native upland forest.	Build what you can manage and manage what you can build; building bigger and not being able to manage it in the long run reduces the effectiveness of protecting the watershed within the fenceline.	The size of fencing units is an ongoing debate. EMoWP strives to find the right balance between minimizing the amount of fencing used (larger units = less fencing, less disturbance in forest, less cost) and making units small enough to manage.	Size of units should be determined through an open dialogue between EMoWP & community.
2. In lieu of mauka-makai connector fences, create small corridors between fencing units in most appropriate places (i.e., areas that do not have intact native forest, and will not cause intensive erosion) as “release valves” that lessen ungulate migration and pressure on large, unfenced areas.	▪ Consider lesser quality areas (not intact native forest) for these potential “release valves” to allow for North-South migration and to ease pressure on unfenced areas not in the watershed partnership. ▪ This would also make coordinated community hunting more effective (ungulates would travel through corridors like fish do through mākāhā). ▪ These areas should not correspond with traditional trails where hunting may conflict with hiking activity and pose a potential safety hazard. ▪ Site these areas in less erosive terrain (this may entail creating an area that runs along contour with the land to reduce scarring and erosion of the landscape).	▪ If you create a corridor, you create edges, basically open more areas to “infection,” where invasive plants can spread. ▪ Creates safety concerns. Narrow corridors could create potential danger if ungulates (esp. in numbers) “collide” with people. ▪ The need for “release valves” indicates over-population. ▪ Another potential strategy might be to increase animal control on the north shore. ▪ The concept needs more study as to its potential effects; consider pros & cons. ▪ May work better along lower contour fence.	The use or non-use of small corridors as “release valves” that lessen spillover impacts to large unfenced areas should be determined through an open dialogue between EMoWP & community.
3. Plant food for ungulates along these “release valve” areas (corridors discussed above).	So less stress is placed on native plant life in neighboring ahupua‘a that have not yet been fenced.	Brings up idea of creating “animal management areas” that are away from native ecosystems (lower). Would allow access to food source & protect ecosystem.	Need dialogue between EMoWP & community, if use small corridors.

Community Suggestion	Additional Community Manaʻo	Initial EMoWP/TNC Molokai Feedback	Implementation
4. Tie in a mauka-makai fenceline to lateral fences erected by EMoWP pursuant to the East Slope Management Plan.	▪ Need to let each ahupuaʻa (or ahupuaʻa cluster), who are in agreement, manage their own area. Those ahupuaʻa (or clusters) who strongly oppose the fence and for which large landowners have not joined the watershed partnership could manage their own areas. In this way, decisions made in one ahupuaʻa (or cluster) do not infringe upon decisions made in another ahupuaʻa (or cluster). ▪ Even if this is an added expense, it is necessary in order to prevent harm to neighboring ahupuaʻa and is consistent with the ʻAha Councils' methodology of caring for the 8 resource realms and utilizing a decision-making matrix that included honoring kūpuna wisdom, addressing the needs of the present, and ensuring abundance for future generations. ▪ As an alternative, we could look at planting a living fence out of acceptable vegetation that would essentially block out-migration to unfenced ahupuaʻa.	▪ Agree with concept of allowing each ahupuaʻa decide on its management. The difficulty comes in getting funding since it's not typically done (no proof of effectiveness). ▪ Also, deer go all the way makai, so a mauka-makai fence wouldn't stop all lateral movement. ▪ Another idea might be to do partial mauka-makai fence and add on a "wing-fence" to draw animals in (would work mostly for goats and on flat areas).	Use of mauka-makai fences should be determined through an open dialogue between EMoWP & community, with all considerations researched and presented.
5. Fencing should correspond with an animal control plan outside the fence that has certain benchmarks based on carrying capacity.	This would bring ungulate population to sustainable numbers that preserve a food resource for subsistence while allowing the land to heal and re-establish preferred vegetation. This could be carried out by or with the help of the community hunting huis/cooperatives discussed in the narrative above.	This again brings up the idea of "animal management areas." There is no evidence that a native Hawaiian forest can sustain any level of ungulate activity. There is strong evidence that a native forest will heal with zero tolerance (no ungulates), which is the goal for fenced areas.	Such animal control is outside of EMoWP/TNC's scope of work, but will help with implementation if requested. Need a carrying capacity study first.
6. Coordinate community hunts accordingly to reach planned benchmarks (outside fence).	Need a carrying capacity study for deer (and possibly pigs and goats), along with a survey on how many of these animals are needed for household consumption. This suggestion could also be carried out by or with the help of the community hunting huis/cooperatives.	Agree.	Kuleana of SAMP implementers. Also a carrying capacity study should be conducted for deer, pigs & goats.

Community Suggestion	Additional Community Mana‘o	Initial EMoWP/TNC Molokai Feedback	Implementation
7. A program integrating conservation by hunters should be included as part of the Hawai‘i Hunter Education Course.	Should teach cultural values regarding hunting (e.g., ATVs, trophy rack hunting, wasting meat, discarding remains, etc.). This program could be developed with the members of the hunting huis/cooperatives.	Agree.	Kuleana of SAMP implementers to work with course teachers.
8. For community hunts, implement technique modeled along surround-net fishing or loko ‘umeiki fishtrap.	Place stakes at every 10 meters along the mountain in the outline of a he‘e (octopus) to mimic the fishing practice of surround net. When community hunts are scheduled, erect a cargo net barrier along the stakes. Hunters from below will chase animals into the net, which will be cinched at the top. Note: animal count surveys should be done beforehand to avoid catching too many animals. Animals hunted for subsistence should be harvested sustainably to continue as a food source, but also in manageable numbers to minimize degradation of native vegetation.	▪ Mostly useful for goats, but probably won’t work for deer or pigs. ▪ Again, there is no evidence that a native Hawaiian forest can sustain itself with any ungulates, but good to minimize numbers.	Kuleana of SAMP implementers.
9. Install cabins up mauka along each ahupua‘a or ahupua‘a cluster (e.g., Pua‘ahala - Ka‘amola; ‘Ohia - Ualapu‘e; Kalua‘aha; Mapulehu - Puko‘o; etc.).	These cabins would be multi-purpose: ▪ Hunters can use them to access areas with a high concentration of ungulates they cannot reach within a day’s hike, who need to stay overnight to continue the hunt & bring the animals down the mountain. ▪ The second purpose is to conduct fence monitoring work, invasive species removal (above & below fence), establishing new stands of native plants, and maintenance of trails & cultural sites. Hunters can be utilized to do such activities.	Need to consider placement – it’s ultimately up to the landowner. Also need to decide who’s responsible for maintenance. There has been vandalism to some cabins, so it might be easier to construct something simple, like a platform with a roof.	Kuleana of SAMP implementers.
10. Create meat distribution points along each ahupua‘a or ahupua‘a cluster on community hunt days.	That way the meat is not wasted; all families can have a fair share of game meat for home consumption.	Good idea, but will take some coordination. It’s been tried before and there is often more meat than can eat, so need a plan for extra meat. Need a hunting leader to determine how much to hunt and to coordinate drop-offs.	Kuleana of SAMP implementers; Hunting Hui may act as lead coordinator.

Community Suggestion	Additional Community Mana‘o	Initial EMoWP/TNC Molokai Feedback	Implementation
11. In those ahupua‘a with fence, a detailed plan and integration of hoa‘āina in ahupua‘a management below the fenceline is essential.	▪ Animals below the fenceline may have increased impact to lower areas of the ahupua‘a (Wao Lā‘au, Wao Kanaka) and created more erosion. ▪ To avoid denuding these areas, planting of native and canoe crops must be undertaken while removing some invasive species (e.g., kiawe, java plum) that extract too much water and negatively impact streams, taro terraces, heiau, and fishing ko‘a. ▪ Create mobile, detachable fencing units to surround and protect native plants and trees.	Need to be careful to not remove invasives (those not along stream) without replanting with natives that hold soil in place.	Kuleana of SAMP implementers.
12. Establish cottage industries among hoa‘āina families to operate backyard native plant nurseries.	▪ Include plants that are grown-out to specific sizes that will not leave these plants/trees vulnerable to ungulate grazing. ▪ Create mobile, detachable fencing units to surround and protect native plants and trees. ▪ Erect water catchment up mauka and re-open springs to water these plants and trees. ▪ Grow native species for mauka and makai areas in these nurseries.	Good idea, although there is no stage at which most plants are not still vulnerable to ungulate grazing.	Kuleana of SAMP implementers.
13. Address secondary impacts/threats to areas that will not be fenced, especially the north shore ahupua‘a.	▪ Deer and pig migrate according to seasonal shifts and food availability (e.g., pigs follow the guava and mountain apple; deer and goat when they reach an old age end up moving further mauka and eating different kinds of vegetation to meet nutritional needs). ▪ Fencing causes ungulates to travel around or to the next unfenced ahupua‘a to find food, this causes more wounds in the land and provides an area for invasives to come into, particularly if these animals end up feeding on native plants *(one kama‘āina informant identified certain native plants ungulates eat when they run out of their preferred food sources).*	This may be true, but what it means is that: a) this should be monitored (e.g., conduct a study on ungulate populations in north shore ahupua‘a before and after fence is erected), and b) animal control should be increased for north shore ahupua‘a.	A study should be done to monitor ungulate populations in the north shore ahupua‘a – before and after implementation of fence. Needs funding.

5.3. NEXT STEPS

Looking forward, here are the basic actions that need to be taken to implement the recommendations from this report:

1. **TNC should continue gathering input and collaborating with Mana‘e Community to integrate recommendations from this Report.**
   - This can be done as part of their CIS (Cultural Impact Statement) and EA (Environmental Assessment) processes.

2. **Mana‘e Community should work together to develop the Subsistence and Ahupua‘a Management Plan for Mana‘e Moku.**
   - This may be led by ‘Aha Kiola o Moloka‘i – Mana‘e Moku or another appropriate entity.
   - Find funding for planning process.
   - Use a community process to select and hire an appropriate community and environmental planner to oversee process.

3. **Identify Potential Groups/Organizations to Oversee Implementation.**
   - Such a group/organization should become apparent during the process of developing the Subsistence & Ahupua‘a Management Plan, based on their involvement. One obvious consideration is the ‘Aha Moku o Moloka‘i – Mana‘e Moku.
   - That group/organization should then seek funding to implement the Subsistence & Ahupua‘a Management.

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[352] Interview with Dr. Kawika Winter, *supra* note 48. (Dr. Winter stated that he “express[es] [this mana‘o] with humility and in the hope that it is staying true to Kumu John’s teachings. ‘Oia ihola me ka ha‘aha‘a a me ka ‘oia‘i‘o.”).
[353] *Id.*
[354] Dr. Kawika Winter Presentation, *supra* note 49.
[355] *A Mau A Mau*, *supra* note 1.
[356] Dr. Kawika Winter, *Conservation Past and Present: Applying "traditional ecological knowledge" philosophies to contemporary conservation practices on Kaua‘i*, Presentation at the Univ. of Haw. at Mānoa Imi ‘Ike Nat. Resources and Envtl. Mgmt. Research Seminar Series (Dec. 10, 2014) [hereinafter Winter, *Conservation Past and Present*].
[357] *Id.*
[358] *Id.*
[359] *Id.*
[360] *Id.*
[361] HANDY & PUKUI, *supra* note 66, at 4.
[362] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[363] Winter, *Conservation Past and Present*, *supra* note 356.
[364] MCGREGOR, NĀ KUA‘ĀINA, *supra* note 120, at 6–8.
[365] MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, *supra* note 29, at 16-17.
[366] It should be noted that each individual landowner has to allow and agree to participation, it is their decision, and not that of the EMoWP.

[367] As described in Chapter 3, Ka Ulu Kukui o Lanikaula is only a small grove today, but it was once a huge forest of kukui trees (some say 600 acres), which were essential for bringing rains to Manaʻe. The rainclouds were said to travel from Hakaʻano, a northeast ahupuaʻa, move through Ulu Kukui o Lanikaula, and further along all the ahupuaʻa of East Molokaʻi, until they reached Kamalō, and moved out to sea towards Lānaʻi.
[368] For more information on Farmer Managed Natural Regeneration, see the following link: http://permaculturenews.org/2008/09/24/the-development-of-farmer-managed-natural-regeneration/.
[369] There may be support for this informant's statements because further interviews and literature search revealed that one of the fishponds in Manaʻe, ʻUalapuʻe fishpond, provided a safety net for the early Hawaiians living in that area. When warriors from Hawaiʻi island attempted to subjugate the people living in Manaʻe it was told in legend that the people knew of an important underwater spring located within ʻUalapuʻe fishpond. The people devised a plot to kill their enemy by poisoning the stream. The enemy perished due to the poisoned waters but the hoaʻāina survived because they secretly gathered the spring water flowing into the fishpond.
[370] Some have argued that hunting is not a traditional and customary practice. However, deer, goat, and pig were introduced prior to 1892, at which time the King placed a kapu on introduced deer which were given as gifts to him; they then became an important part of subsistence for Molokaʻi families. Culture has evolved to include these animals as important food sources for traditional subsistence. Therefore, they are protected by the Hawaiʻi Constitution Article XII, §7 and HRS, § 1-1.
[371] *Summary Update of the East Slop Watershed Project*, *supra* note 38.
[372] One of the authors conducted an informal talk-story with two kamaʻāina informants of the ahupuaʻa of Hālawa (one of them being the oldest living Native Hawaiian born and raised in Hālawa who still lives there), which is what this sentiment is based on. Because it was a short discussion and not a formal interview, the notes were not included in the Meeting Notes.

Traditional & Customary Practices Report for Manaʻe, Molokaʻi

Traditional Subsistence Uses, Mālama Practices and Recommendations,
and Native Hawaiian Rights Protections of Kamaʻāina Families of
Manaʻe Moku, East Molokaʻi, Hawaiʻi

February 2016

Appendices

A. Intake Form
B. Description of Cultural Sites Identified on Map
C. Hui Aloha ʻĀina o Manaʻe's "Aloha ʻĀina Training Program"

Name				
Mailing Address				
Email				
Phone	Home	Work	Cell	Age
Gender		Relationship Status		
Male	Female	Married	Single	Living w/ partner
Employment Status (please check appropriate box)	Employed	Unemployed	Laid Off	If working, where do you work? Or what type of work do you do?
Household Income (please circle)	$ 0 – 9,999	$10,000 – 19,999	$20,000 – 29,999	$30,000 – 39,999
	$40,000 – 49,999	$50,000 – 59,999	$60,000 +	
Please specify number, including self:	How many people are living in your home?	How many children (17 yrs or younger) are living in your home?	How many adults (18 yrs or older) are living in your home?	How many families are living in your home?
What is the highest level of formal education you have completed? (please circle)	Less that grade school	Grade school (6 years)	Intermediate school	High school (12 years)
	G.E.D.	Trade School	College	Graduate school
Ethnic/Racial Background (please circle)	Caucasian	Chinese	Filipino	Japanese
	Korean	Native Hawaiian (full or part)	Pacific Islander	Portuguese
	Multiple Ethnic (non-Hawaiian)	Other:		

Name:				
District of Residence (please circle)	Maunaloa / Kaluakoʻi	Hoʻolehua	Kualapuʻu / Kalae Kipu	Kalamaʻula / Kaunakakai
	East End (Manaʻe)	Kaunakakai / Kawela	Halawa / North Shore	Kalaupapa
Place of Birth	Where did you spend most of your 18 yrs growing up?	How many years have you lived in the state of Hawaiʻi?	How many years have you lived on Molokai?	What ahupuaʻa do you currently reside in?
As to Manaʻe ahupuaʻa, which ahupuaʻa do you have genealogical connections to? (Circle all that apply)	Kamalo Kapualei Kumueli Wawaia Puaʻahala Kaʻamola Keawanui West ʻOhia East ʻOhia Manawai Kahananui ʻUalapuʻe Kaluaʻaha Mapulehu Punaula Pukoʻo Kupeke Ahaʻino 1 Ahaʻino 2 Kailiula Honomuni Kawaikapu Kainalu Puniuohua Puelelu Puniuhoa 2 Puniohua 1 Waialua Moanui Kumimi Honouliwai Honoulimaloʻo Keahuoku Lupehu Pohakupili Moakea Keopukauuku Keopukaloa Koaliʻi Halawa Wailau Pelekunu			
Definition of Subsistence: The customary and traditional uses by Molokai residents of wild and cultivated renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, transportation, culture, religion, and medicine; for barter, or sharing, for personal or family consumption; and for customary trade.				
Which of the following traditional and subsistence activities have you or family engaged in while living on Molokai? (Please circle all that apply)	Hawaiian traditional and religious ceremonial practices	Hunting	Land gathering	Stream gathering
	Fishing and ocean gathering	Farming, gardening	Fishpond, aquaculture	Raising livestock
If you do not engage in any of these activities, why not?	Too busy	Too old	Disabled	Not interested
	Rely on others	Other: _____		

Name:				
About how many <u>times a month</u> do other people on Molokai give your family food like fish, meat, limu, etc. that they have caught, gathered, or grown themselves?				____ times a month
Overall, how important is subsistence to your family?	1 Very Important	2 Somewhat Important	3 Somewhat unimportant	4 Not at all Important
About what percent of your family's food comes from subsistence activities (fishing, hunting, gathering, raising animals, cultivation)?				_____ %
Do you ever use the resources you get from subsistence for any of the following activities? (Circle all that apply)				
Sharing/Gift-Giving	Exchange/Trade	Sale	Restock	Other: _____
Does subsistence benefit you and your family in any of the following ways? (Please circle all that apply)				
Carry on the culture	Family togetherness	Spiritual well-being/Religion	Exercise/Health/ Diet	Recreation
Medicine	Education	Leis, Decorations, and Crafts	Other: _____	
Do you use subsistence resources for special occasions?			Yes	No
If yes, for what types of special occasions do you collect for? (Circle all that apply)				
Anniversary parties	Birthdays	Funerals	Graduations	Holiday celebrations
Lūʻau	Reunions	Weddings	1-Year Anniversary of Death	Blessing Something Newly Built
Other:				
Do you collect food from the ocean or land for people from other islands?			Yes	No
When you go fishing, hunting, or gathering, how often do you take people from off island with you?	1 Always	2 Often	3 Rarely	4 Never

Name:					
Do you fish?		About how many days in the past year did you fish?	Does this number represent a typical number of days you fish every year?		If no, why?
Yes	No	_____ days	Yes	No	
During which season of the year do you do the most fishing?		Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)
What types of fish do you generally catch? (please circle all that apply)					
Awa		Akule	Aholehole	Ahi	Aweoweo
Enenui		Hage	Hinalea	Kahala	Kaku
Kawakawa		Kole	Kumu	Kupipi	Lai
Mahimahi		Mamo	Marlin/Kajiki	Menpachi/U'u	Moana
Moi		Mu	Mullet	Nabeta	Oio
Onaga		Ono	Opakapaka	Opelu	Palani
Papio/Ulua		Rainbow Runner	Ta'ape	Toau	Uhu
Weke		Uouoa	Other:		
Do you gather other resources from the ocean?		About how many days in the past year did you gather resources from the ocean?	Does this number represent a typical number of days you gather ocean resources every year?		If no, why?
Yes	No		Yes	No	
During which season of the year do you do the most ocean gathering?		Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)

Name:					
Identify the types of resources you gather from the ocean. (circle as many that apply)					
Crab/Papa'i		He'e/Octopus	Kupe'e	Leho	Lobster/Ula
Opihi		Pipipi	Salt	Sea Cucumber/Loli	Shrimp/Opae
Sea Urchin/Wana		Other:			
Do you hunt?		About how many days in the past year did you hunt?	Does this number represent a typical number of days you hunt every year?		If no, why?
Yes	No		Yes	No	
During which season of the year do you hunt the most?		Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)
Identify the types of animals you hunt. (circle those that apply)					
Axis Deer		Birds	Goats	Pigs	Other: _____
Do you gather from the land?		About how many days in the past year did you gather from the land?	Does this number represent a typical number of days you gather from the land every year?		If no, why?
Yes	No		Yes	No	
During which season of the year do you gather from the land the most?		Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)
Identify the types of wild plants/fruits you gather from the land. (circle those that apply)					
A'ali'i		Ahinahina	Akala	Ahuhu	Alahe'e
Alae		Awa	Banana/Maia	Guava	Hala
Hapu'u/Ferns		Hau	Ha'uwi	Ho'io	Iliahi/Sandalwood
Ilima		Kaunaoa	Kiawe	Koa	Koali
Ko'oko'olau		Kou	Kukui	Laukahi	Liko/Lehua

Name:				
Identify the types of wild plants/fruits you gather from the land. (circle those that apply)				
Lilikoi	Loulu	Maile	Mangrove	Maunaloa
Mamake	Milo	Niu	Noni	Oranges
Papaya	Paria	Pepeiao	Plum	Popolo
Ti Leaf/Shoot/Root	Uhaloa Leaf/Root	Ulu	Other:	

Do you gather from streams?		About how many days in the past year did you gather from streams?	Does this number represent a typical number of days you gather from streams every year?		If no, why?
Yes	No		Yes	No	

During which season of the year do you gather the most from streams?	Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)

Identify the types of things you gather from streams. (circle those that apply)				
Aholehole	Crabs	Frogs	Hihiwai	Mullet
Opae	O'opu	Prawns	Pupu	Uouoa
Other:				

Do you grow vegetables, fruits, and/or medicinal plants for your family?		If yes, please list the types of vegetables, fruits, and/or medicinal plants you grow.
Yes	No	

Do you raise animals for food for your family?		If yes, what types of animals do you raise?		
		Poultry		
Yes	No	Meat	Eggs	Fighting Cocks
Cattle	Deer	Rabbits	Goats	Pigs

Do you support the proposed East Molokai Watershed Project?			Are you concerned that the proposed East Molokai Watershed Project extending from Kamalo to Halawa will impact your traditional subsistence and religious practices?		
Yes	No	Unsure	Yes	No	Unsure
Why?			If yes, how so?		

Name:

As to Manaʻe, which ahupuaʻa do you access for traditional, religious, ceremonial purposes and/or gather, fish, farm, and/or hunt for subsistence? (Please check all that apply)

Ahupuaʻa Name	Religious & ceremonial practices	Hunting	Land gathering	Stream gathering	Fishing & ocean gathering	Farming, Gardening	Fishpond, aquaculture	Raising livestock
Kamalo								
Kapualei								
Kumueli								
Wawaia								
Puaʻahala								
Kaʻamola								
Keawanui								
West ʻOhia								
East ʻOhia								
Manawai								
Kahananui								
ʻUalapuʻe								
Kaluaʻaha								
Mapulehu								
Punaula								
Pukoʻo								
Kupeke								
Ahaino 1								
Ahaino 2								
Kailiula								
Honomuni								
Kawaikapu								
Kainalu								
Puniuohua 2								
Puniuohua 1								
Waialua								
Moanui								
Kumimi								
Honouliwai								
Honoulimaloʻo								
Keahuoku								
Lupehu								
Pohakupili								
Moakea								
Keopukauuku								
Keopukaloa								
Koaliʻi								
Halawa								
Wailau								
Pelekunu								

Description of Cultural Sites Identified on Map on page 32:

1. Huelo – Located on the northern shore, just east off of Makanalua Peninsula, Huelo is known to be the home to the very last endemic loulu palm (*Pritchardia munroi*). Seedlings from here have been transfered to the Kalaupapa plant nursery, Kamalō, and mauka Kainalu for cultivation and re-propagation of this species.
2. Pelekunu – Much like other surrounding valleys, Pelekunu is known for its plethora of loʻi that were cultivated here. One of its associated islands, Mōkapu, is known for its role in the "Moʻolelo of Haʻihaʻikū." A north-south traditional trail is known to have gone from Pelekunu valley through to Kamalō. In 1960, a diversion of that same trail was documented to lead to Manuahi as well.
3. Kamakou Preserve – The Kamakou rainforest was fenced off by The Nature Conservancy of Hawaiʻi as its distinct natural flora are rare and have yet to be tainted by humans. There are many native species of plants and animals found within this portion of land that are not found with such high integrity elsewhere in Hawaiʻi.
4. Kapuʻokoʻolau/Kapoʻokoʻolau – "There's a place, Waikuʻilani, that goes to Kapoʻokoʻolau. There used to be a waterfall going into the gulch that sank down into the ground (not into the ocean). But along the ocean portion, it formed springs. Each fishpond [on east Molokaʻi] has 2-3 springs."
5. ʻŌhiʻa – "My ʻohana was instructed only to pick kukui from east ʻŌhiʻa, but when the [name removed to protect confidentiality] family built a hale up there, the lepo came down and the stream overflowed. The kukui was used for eating, to make inamona and to dye their fishing nets. Some kukui bark can make a dark maroon dye. Other kukui is more reddish. When trying to surround a pile of fish, the fish will be spooked and run into the dark. If the fish is maroon, it can hide. This allowed the fisherman to be more selective in harvesting." There is also a known koʻa (fishing grounds, usually identified by lining up with marks on shore) off-shore of ʻŌhiʻa that was used by fishermen until kiawe was spread by cattle and grew too thick and tall to utilize the koʻa traditionally.
6. Manawai – Known to have 12-15 documented heiau sites as discussed in a field study done by Kathleen Kawelu, Ph.D.
7. Pākuʻi – Most known for its heiau where a prophecy was made concerning the sovereignty of Hawaiʻi and how "the little fish (makaʻāinana) will rise to eat the big fish (aliʻi)".
8. ʻIliʻiliʻōpae – Located in the Pūkoʻo area, ʻIliʻiliʻōpae is known as the second largest heiau throughout Hawaiʻi. It is told that this particular heiau was used for "sorcery" and human sacrifice was practiced here.
9. Wailau – Much like its neighbor valleys (Pelekunu to the west and Hālawa to the east), Wailau was made up of many loʻi complexes. These were documented and discussed in Dr. Windy McElroy's dissertation. There is a traditional/historic trail that leads out from Wailau and cuts towards Mapulehu as well as the coast that is still used to this day. Wailau is also known for its rocks lying offshore and its relevance to the "Moʻolelo of Kana."

10. Olokuʻi – One of the most pristine areas in Hawaiʻi. In fly-overs you can see banana patches. People lived there as evidenced from the banana groves. ʻOlokuʻi has largely escaped impact so far from humans in modern times.
11. Honomuni – It is said that in this area, Kamehameha had his people build a great loʻi that fed majority of the east coast of Molokaʻi.
12. Pākaikai – Also known as "Queen's bath", this area has a great abundance of loʻi terracing that indicate the cultivation that went on in here in the past. A local of Molokaʻi addressed that this area called Pākaikai was traditionally located closer to Puʻu ʻŌhelo rather than where it is now identified to be located.
13. Hālawa – A plethora of cultural sites have been located within this valley as it was heavily inhabited and used for cultivation of kalo and other native plants. A full report of all sites within it can be read through Dr. Patrick Kirch's Hālawa Study.
14. Moanui & Kumimi – both known for the vast aliʻi burials located here.
15. Ka Ulu Kukui o Lanikaula – The kukui groves of Lanikaula are well known for their significance to the chiefess Lanikaula and demarcated as an area where she would play. Today, Ka Ulu Kukui o Lanikaula can be seen as a paradigm for what is happening to Hawaiʻi's forests.
16. Pōhakupili – There are many springs located in this area that begin their flow from mauka all the way down to the various fishponds makai. If the top sources are clogged or dry, the springs down below also dry-up. This is the epitome of what is happening with the watershed in Manaʻe.

Hui Aloha ʻĀina o Manaʻe

Aloha Āina Training Program

Field Crew	Training Activities	Training Activities
Feral Ungulate Management	Hunting/Slaughter/ Meat distribution	Transect monitoring
Invasive Plant Removal	Hand removal, Chainsaw removal	Mulching/ Timber production
Native Plant Nursery/ Restoration	Seed Collection/Nursery Propogation	Grow out/ Re-planting
Stream/Riparian Zone Restoration	Invasive Species Removal/ Clean Debris	Native Species Monitoring
Shoreline Monitoring	Important Near Shore Resources	Invasive Species Removal
Loʻi Kalo Restoration/ Production	Loʻi Restoration	ʻAuwai Maintanence
Sustainable farming/ Commercial production	Vegetables	Fruit
Loko Iʻa Restoration/Production	Kuapā restoration	Aquaculture
Offshore monitoring	Important Offshore Resources	Subsistence Enforcement
Traditional Navigation, Moon cycles and seasons		
Native art		